

The

CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

JULY 31 1954

Established 1866

KIRBY

LONDON

for **PILLS** ★ **TABLETS** ★ **CAPSULES**
PESSARIES • **SUPPOSITORIES** • **SOLUTION TABLETS**
PENICILLIN PRODUCTS • **OINTMENTS FOR THE EYE**
SOFT GLYCERIN LOZENGES • **PACKED PHARMACEUTICALS**
STERILE PRODUCTS

Own materials processed • Special Formulæ prepared
Home and Export enquiries invited

Price List forwarded on application to :—

H. & T. KIRBY & CO. LTD.

Manufacturing Chemists, WILLESDEN GREEN, LONDON, N.W.2.

Phone: Willesden 1146 • Grams: Kirbilim, Norphone, London • Code: Bentleys (2nd)

*Needs to be
developed bully!*



**One-third of the market already uses a denture
cleaner . . . two-thirds await development**

1 in 3 of the twenty million denture wearers already use a specific denture cleaner. But the other two-thirds still use makeshifts. Even kitchen scourers!

Research shows that when customers try Steradent they keep on buying it. Steradent's lively, new, biggest-ever advertising is aimed at those remaining two-thirds!

So just show your customers that you stock Steradent and (if we may strain the metaphor beyond endurance!) . . .

Develop the other two with

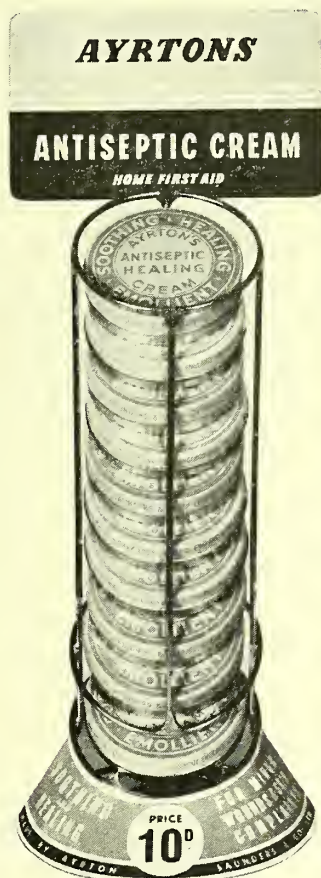
Steradent
REGD

**Specially made
for cleaning dentures**

AYRTONS

ANTISEPTIC HEALING CREAM

is probably one of the best selling Chemists' Own Family Ointment and is a popular necessity in the home first aid cabinet.



NOW this trim, chromium wire Dispenser makes Ayrtons' Antiseptic Cream an even more attractive selling proposition. The Dispenser is now available, on request, with all orders for *six dozen small tins*.

Small size tins 5/- per dozen
gross lots 4/10 per dozen
plus tax 25%

Retail 10d.

Large size tins 9/3 per dozen
gross lots 9/- per dozen
plus tax 25%.

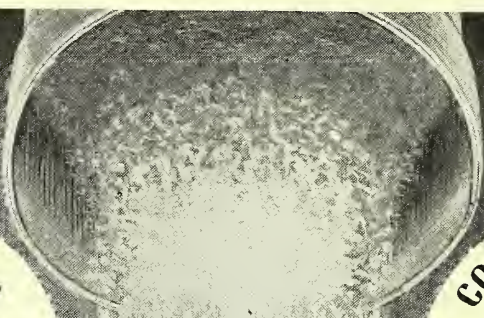
Retail 1/6

AYRTON SAUNDERS

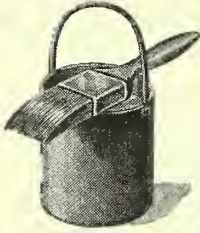
& CO. LTD

HANOVER STREET · LIVERPOOL

Telephone Royal 8282



PAINT




CONFECTIONERY



FOODSTUFFS



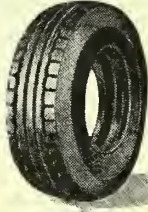
FIRE EXTINGUISHERS



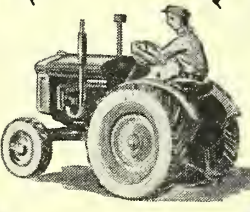
MEDICINE



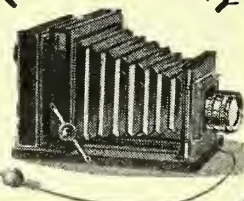
RUBBER



AGRICULTURE



PHOTOGRAPHY



**GREEFF
CHEMICALS
FOR
EVERY
TRADE**

R.W. GREEFF & CO. LTD.
12, FINSBURY CIRCUS, LONDON, E.C.2 *Grams: GREEFF AVE LONDON. Phone: LONDON WALL 5241*

At your finger tips.....



**..... BUMPER
SUMMER SALES**

Medical Beauty Products on Bonus Terms

Our wonderfully successful twice weekly programme "Dreamtime" from Radio Luxembourg features throughout the summer Crookes Lacto-Calamine, the new Crookes Hand Cream—the product which the Mount Everest climbers chose to use on their faces and hands—and the brand new Crookes Hand Lotion which is proving yet another winner in our range of Medical Beauty products.

Full particulars on request.



PATA

CROOKES

CROOKES

Lacto-Calamine
Hand Cream & Lotion

THE CROOKES LABORATORIES LIMITED · PARK ROYAL · LONDON N.W.10



LIVER AND YEAST CONCENTRATE

Combining Liver Extract,
Yeast, Vitamins B₁ and B₂

AN IDEAL TONIC

HASTENS CONVALESCENCE
AND HELPS OVERCOME
LASSITUDE, FATIGUE AND
MALAISE

PACKED IN 4 oz., 8 oz.,
and 16 oz. BOTTLES

DISPENSING PACKS
40 oz., 80 oz. and 1 gallon

Write for Literature to:

THE ARMOUR LABORATORIES
(ARMOUR & COMPANY LTD.)

HAMPDEN PARK, EASTBOURNE, SUSSEX

Telephone: Hampden Park 740

Telegrams: "Armolab" Eastbourne

NEW!

NYLO-COMPACT-PUFF

SILK BACKED MADE FROM NYLON

WASHABLE - LONGLASTING

FINISHED IN PASTEL SHADES
BLUE PINK and WHITE

SUPPLIED IN TWO SIZES
2 in. and 2½ in.

PRICES:

2½" NYLON FLUFFY @ 4/9 per doz. — plus P.T.
2½" NYLON VELVET @ 4/6 per doz. — plus P.T.
2" NYLON FLUFFY @ 3/6 per doz. — plus P.T.
2" NYLON VELVET @ 3/3 per doz. — plus P.T.
INDIVIDUALLY PACKED

Wholesale Inquiries Welcomed.

NYLO - PUFF LIMITED

91a HIGH STREET · CAMBERLEY · SURREY

Telephone: CAMBERLEY 979

NATIONAL ADVERTISING

Increased Sales
of

Dr. Page Barker's
Scurf and Dandruff Lotion
and D.43 Shampoo

The National scale advertising for these highly respected treatments is to be continued because of its marked success in the last six months. To make the most of the growing demand from the public, stock, display and recommend Dr. Page Barker's products. Showcard sent free on request.

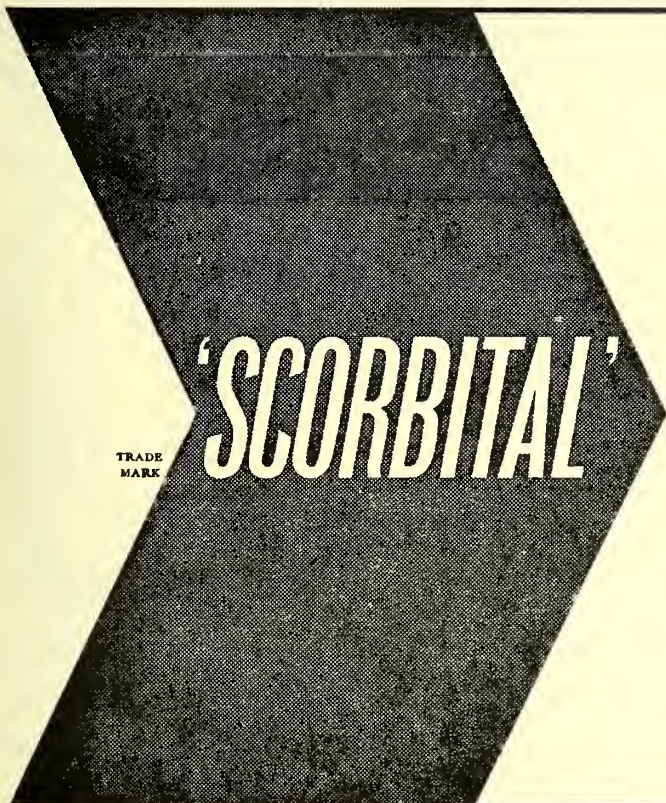


THOS. CHRISTY & CO. LTD.
North Lane, Aldershot — HANTS.

INDEX TO ADVERTISERS

Andomia Products, Ltd.	27	Daniel, Richard, & Son, Ltd.	13
Armour Laboratories, The	4	Dunn Bros. Successors, Ltd.	Leader Page
Ashwood Timber Industries, Ltd.	32	Dyanese, Ltd.	26
Ayrton & Saunders & Co., Ltd.	1		
		Ephazone, Ltd.	20
Barnett & Foster, Ltd.	28	Evanol, Ltd.	12
Beatson Clark & Co., Ltd.	36		
Bell, John, Hills & Lucas, Ltd.	25	F.A.I.R. Laboratories, Ltd.	27
Bencard, C. L., Ltd.	Cover iv	Felling Zinc Oxide Co.	12
Berdoe & Fish	Classified Section	Ferris & Co., Ltd.	Leader Page
Boots Pure Drug Co., Ltd.	14	Fibrenyle, Ltd.	23
Bovril, Ltd.	11	Fish Optical Co., Ltd.	41
Brannan, S., & Sons, Ltd.	34	Foyles, W. & G., Ltd.	Leader Page
British Drug Houses, Ltd., The	5	Franks, Alfred, & Bartlett Co., Ltd.	18
Brome & Schimmer	38	Freder Bros. Paper Mills	38
Brook, Parker & Co., Ltd.	10	Fricker, F. E., Ltd.	Leader Page
Buckley Bowker Tablet Co., Ltd.	41		
Burrough, James, Ltd.	Leader Page	Gale & Mount, Ltd.	26
Burroughs Wellcome & Co.	21	Greeff, R. W., & Co., Ltd.	2
Carnegies of Welwyn, Ltd.	6	Hamburger, M., & Sons	36
Cellucotton Products, Ltd.	42	Holland, I., Ltd.	32
Chemicals Trading Co., Ltd.	13		
Chemist & Druggist Art of Dispensing	41	International Bottle Co., Ltd., The	31
Chemist & Druggist Diseases and Remedies	39		
Christy, Thomas, & Co., Ltd.	4	Jobling, James A., & Co., Ltd.	32
Ciba Laboratories, Ltd.	24	Jones, Samuel, & Co., Ltd.	24
Coates, William, & Son, Ltd.	9		
Colby, Ltd.	10		
Cox, Arthur H., & Co., Ltd.	8		
Crookes Laboratories, Ltd.	3		
Cuxson Gerrard & Co., Ltd.	41		

(continued overleaf)



NEW

“Ascorbic acid, 200 mg. at night or on waking has been found valuable in combating the hang-over effects of barbiturates.”

(PROC. ROY. SOC. MED., 1954 (MAR.), 47, 215).

SCORBITAL TABLETS contain Phenobarbitone 16 mg. (gr. $\frac{1}{4}$) Ascorbic Acid 100 mg.

PHENOBARBITONE +

Scorbital is particularly useful for patients who need to take phenobarbitone at night, especially over prolonged periods. The risk of an accumulation of hang-over effects is eliminated if Scorbital is prescribed instead of phenobarbitone.

TRADE Bottle of 50 - 3/6 Bottle of 250 - 13/-
RETAIL Bottle of 50 - 5/3

SBL/7/541

THE BRITISH DRUG HOUSES LTD. LONDON N. 1

INDEX (cont.)

Kay Brothers, Ltd.	20	Phillips Electrical, Ltd.	15
Kemball, Bishop & Co., Ltd.	28	Powley, R., & Sons, Ltd.	18
Kemsales, Ltd.	38	Rankin Bros. & Sons .....Leader Page	
Kennett Price Markers	36	Rayner & Co., Ltd.	26
Kirby, H. & T., & Co., Ltd. ....Front Cover		Regna Cash Register Co.	10
		Ribbands, C., & Sons .....Classified Section	
		Robinson & Sons, Ltd.	35
London Commercial Electrical Stores, Ltd., The ...	37		
Macdonald & Son, Ltd.	20	Sankey, Jos., & Sons, Ltd.	34
Manesty Machines, Ltd.	9	Scruton, O., & Co., Ltd.	40
Matthews & Wilson, Ltd.	40	Shopfitters (Lancashire), Ltd.	33
Matthews, Stephen, & Co.	38	Simpkin, A. L., & Co., Ltd.	40
Maw, S., Son & Sons, Ltd.	14	St. Andrew Mills, Ltd.	17
Mayborn Products, Ltd.	7	Standard Synthetics, Ltd.	36
Mayor, George (Pharmaceuticals), Ltd. ....Leader Page		Steradent .....Cover ii	
McKesson & Robbins, Ltd. ....Leader Page		Surgical Equipment Supplies, Ltd.	12
Medico-Biological Laboratories, Ltd.	16	Suttley & Silverlock	33
Mehta Brothers	39		
Merica, M., & Co., Ltd.	26	Thermos (1925), Ltd.	40
Mitchell, L. A., Ltd.	32		
"Myers of Old Street" .....Classified Section		United Glass Bottle Manufacturers, Ltd.	29
		Universal Metal Products, Ltd.	19
"Nervone"	26		
Niblett, C. P. ....Leader Page		Vitamins, Ltd.	10
Nylo-Puff, Ltd.	4		
		Washington Chemical Co., Ltd., The	25
Orridge & Co. ....Classified Section		Webster, Isaac, & Sons, Ltd.	34
Ortho Pharmaceutical, Ltd.	30	Whiffen & Sons, Ltd. ....Cover iii	
		Whitehead Industrial Trust, Ltd.	41
Pharmaceutical Laboratories Geigy, Ltd.	22	Wilkinson, S. W., & Co., Ltd.	37
		Wimsol, Ltd.	41

From the Carnegie Range of Fine Chemicals

SANTONIN

CARNEGIES OF WELWYN LTD

Telegrams: 'CARNEGIES, WELWYN GARDEN CITY'

Telephone: WELWYN GARDEN 5001

(6 lines)

Another DYLON winner at **33 $\frac{1}{3}$ %** net profit!

MOTHMASTER

carpet and fabric
mothproofing cleaner



SELLING PRICE

3/6

**THE ONLY PRODUCT OF ITS
KIND GUARANTEED BY THE
GOOD HOUSEKEEPING
INSTITUTE** made by the manufacturers
of Dylon Dyes.

Because scores of thousands of housewives need MOTHMASTER for its double action as a cleaner and mothproofer, this new DYLON product will make money for you. MOTHMASTER not only cleans and mothproofs carpets and upholstery in one operation—it is also a perfect woollie-washer, cleaning and mothproofing precious woollens and blankets with no smell of camphor or mothproof memory!

*It is certain that
MOTHMASTER
will make profits faster!*

**Feature this MOTHMASTER
DISPLAY UNIT
on your counter**

We will send you this attractive PLASTIC display unit FREE with initial order for MOTHMASTER packed in cartons, holding 1 dozen bottles.



Enquiries to:

MAYBORN PRODUCTS LTD. DYLON WORKS, SYDENHAM, S.E.26

No. 5 of a Series PRESENTED BY ARTHUR H. COX & CO. LTD



“Dr. Brighton” prescribes . . .

Hitherto, we have described very briefly, part of Brighton's Historical and Social background, particularly the town's associations with the Regency period. It is now time to turn to the 'Dr. Brighton' of today.

Its development has been rapid and has reached an area of 14,500 acres. Our illustration this month shows a portion of the magnificent esplanade, 5 miles in length and possessing a lively Continental atmosphere. This great undertaking ranks as one of the most extensive in the world and is probably unequalled for the variety of its features, which range from town promenade to downland coast, from snackbar to palatial restaurant, concert party to theatreland and others too numerous to mention here.

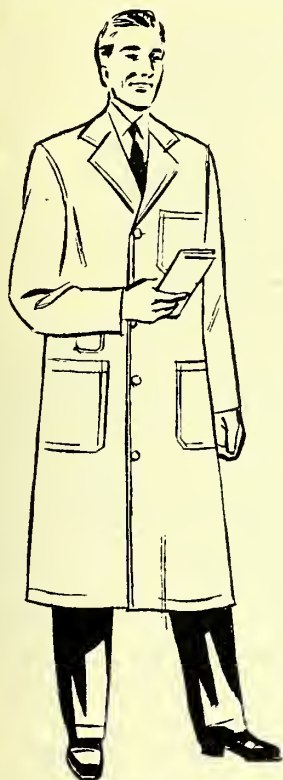
The town's industrial expansion has been no less interesting and in this field Arthur H. Cox & Co. Ltd. has always held a prominent place not only because of its size, but also owing to the date of its foundation.

One of the world's largest sugar coating plants, every kind of Pill and Tablet is designed, manufactured and packed at the Brighton establishment for a great variety of purposes. Efficacy combined with elegance distinguishes these products which chemists and doctors recommend with confidence.



Regd. Trade Mark

ARTHUR H. COX & CO. LTD
Manufacturing Chemists since 1839
BRIGHTON 7



THE FAMOUS "F.G." REGISTERED MAKE

LONG COATS

WHICH ALWAYS CARRIES A GUARANTEE

WHITE OR KHAKI

MADE OF DRILL WHICH IS FULLY SHRUNK

3 FOR £3.5.0

CARRIAGE PAID

Sizes: 34" to 46"—no less quantity sold
(C.O.D. orders 1/2 extra)

(Chest measurements over a vest, please)

WILLIAM COATES & SON LIMITED
FRIARS GATE • WARRINGTON • LANCASHIRE

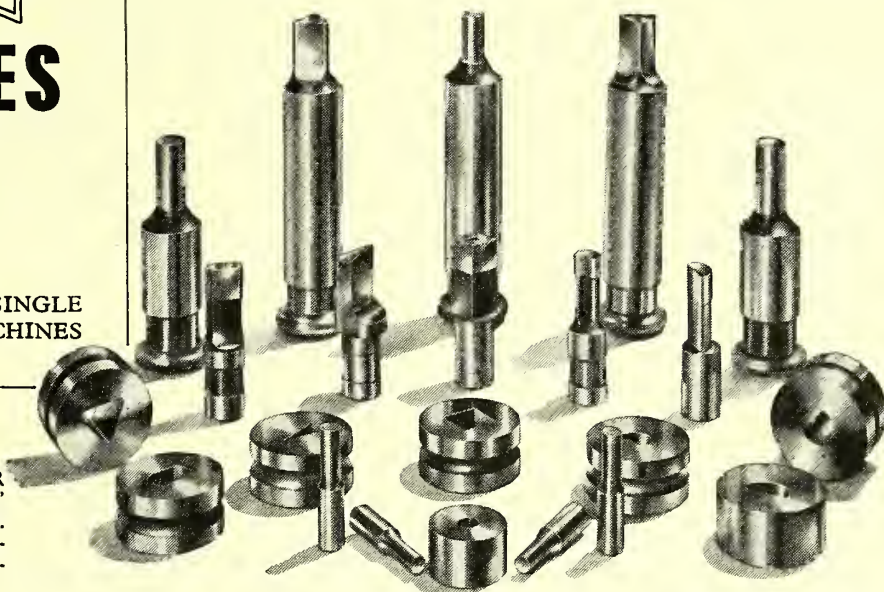
MANESTY

PUNCHES AND DIES

FOR ROTARY AND SINGLE
STROKE TABLET MACHINES

★ ★

SEND TODAY FOR YOUR
COPY... "TABLET MAKING"
by A. Little and K. A. Mitchell.
123 pages, 31 formulæ, 47 illus-
trations. Cloth bound. 15/-
Post free.



ACCURATE • HIGHLY FINISHED • LONG LASTING

MANESTY MACHINES LIMITED

DEPT. 5 • SPEKE • LIVERPOOL 19 Telephone: Hunts Cross 1972. Telegrams: Manesty, Liverpool 19

FOR ALL MAKES
OF MACHINES
QUICK DELIVERIES

If he's asking for aspirin

. . . it is time he heard about VITASPRIN tablets! For VITASPRIN contains not only *soluble* aspirin, for really prompt relief of pain, but also important additions of vitamin C and vitamin K.

Why vitamin C?

Because many conditions that call for aspirin, e.g. mild infection, are improved by the further addition of vitamin C.

Why vitamin K?

Because it offsets the tendency of aspirin to delay blood clotting and is therefore especially valuable after tooth extraction and other procedures involving blood loss.

PRICES	Retail	Chemists
25	2/6	1/9½
100	7/7	5/5

These Prices include P/Tax

FORMULA (per tablet).
 Ascorbic acid 20 mg;
 menaphthone bisulphite
 2 mg; soluble aspirin,
 equivalent to Acetylsalicylic
 acid, 325 mg. (= 5 gr.)



VITASPRIN

VITAMINS LTD., (Dept. AA. 104), Upper Mall, London, W.6

VARICOSE VEINS

2-WAY STRETCH ELASTIC HOSIERY



This hosiery gives full two-way support and is invisible under most ordinary stockings.

*available in the
following styles*

NYLON YARN

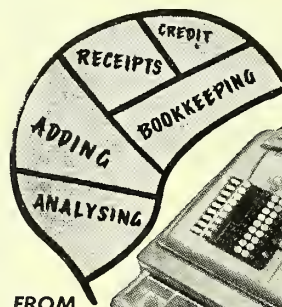
Seamless, sheer and fully fashioned
 Proofed for ladder resistance.
 Reinforced closed heel.

LASTEX YARN TYPE

Seamless, fully fashioned, durable.
 Proofed for ladder resistance.
 Reinforced closed heel.

*Write for prices, material
 samples measurement chart and order forms*

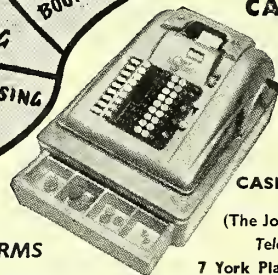
COLBY PRODUCTS LIMITED
 314 EUSTON ROAD, LONDON, N.W.1



FROM
£78
 H.P. TERMS

REGNA
 CASH REGISTER

*The Figure-Head
 of the Business*



THE REGNA
 CASH REGISTER COMPANY
 Proprietors:
 (The Joeli Safe Co. (London) Ltd.)
 Telephone: TRAfalgar 3718
 7 York Place, Adelphi, London, W.C.2

To the WHOLESALE & EXPORT TRADE



We specialise in
 the manufacture of
 Pills and Tablets
 to any formula
 and invite your
 enquiries for large
 or small quantities
 in bulk or packed
 in attractive styles.

BROOK, PARKER & Co., Ltd.

Mfg. Chemists HORTON ROAD, BRADFORD.

IT'S

80%

REAL
ORANGE JUICE

sweetened with pure sugar

*no wonder more and more
customers are saying*

I'd rather have a —

GOLD CUP

Jaffajuce
ORANGE



**Widespread National Advertising is making
JAFFAJUCE more popular every day!**

★
**HUGE
ADVERTISING INCREASE**

*will mean
bigger demand for*

EVANOL

Are you stocked up? A new and much bigger advertising campaign on a full national scale is now under way to sell Evanol. Women and girls of all ages will read how this amazing hair brightener can put new life and colour in their hair *without dyeing it*.

STOCK UP NOW!

The demand for Evanol will be heavy, so stock up now. Get your order in early—this week! By displaying Evanol *now* you will remind potential customers to come in and buy a bottle. And once a customer tries Evanol she'll go on buying it from you *regularly*.

Remember—there's a free, colourful show card available to help push your sales. Just drop us a line asking for this attractive display piece. We shall be pleased to send you one right away.

Strong, hard hitting advertisements will appear in every magazine listed below. This wide range of publications has been carefully chosen so that 18,895,270 women will read about Evanol and want to try it—buy it!

Reveille : Midweek Reveille : Week-end Mail : Woman : Woman's Own : Woman's Weekly : Red Letter : Red Star Weekly : Family Star : Weekly Welcome : Secrets My Weekly : Lucky Star : Glamour Picturegoer : True Story : True Romances Oracle : Miracle : Woman's Illustrated Home Notes : Picture Show : Home Chat Woman's Pictorial

★
EVANOL
LIQUID HAIR BRIGHTENERS
put new life and colour in hair

EVANOL Ltd., Highbury, London, N.5
Enquiries Dept.: CANonbury 1984

SCP/E

The Best costs no more!

when ordering ZINC OXIDE
insist on —

FELLING
ZINC OXIDE B.P.

**AND GET THE
Highest Standard of Purity**

**WHOLESALE ONLY SUPPLIED
ENGLISH MANUFACTURE
USED THROUGHOUT THE WORLD**

Guaranteed free from lead and arsenic. Its manufacture is supervised throughout by qualified chemists. Each particle size will pass 240 mesh with less than 0.1% residue.

We supply most Wholesalers, but should you have difficulty please contact

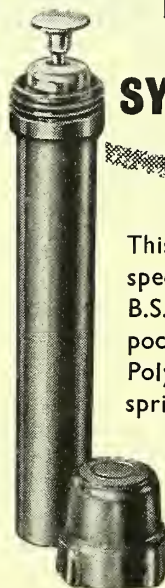
H. LATTIMER

22 UPPER GROUND,
BLACKFRIARS, LONDON SE1

Telephone: WATERLOO 5800

Manufactured by **THE FELLING ZINC OXIDE COMPANY**

New!
**Pocket-Size
INSULIN
SYRINGE CASE**



This new, plastic syringe case, specially designed for the new B.S.I. 1619 Insulin Syringe is pocket-size and spirit-proof. Polythene washer and retaining spring hold syringe firmly in the spirit. For syringes up to 2cc. size.



SURGICAL EQUIPMENT SUPPLIES LTD
WESTFIELDS ROAD, LONDON, W.3

T.A. 6703

FOR CHEMISTS



DRUGS

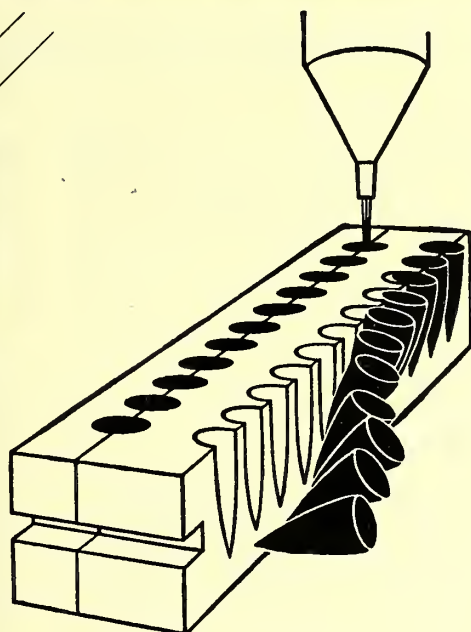
SUNDRIES

Manufacturing Chemists

**PILLS • TABLETS
PROPRIETARIES**

HEAD OFFICE & WORKS: MANSFIELD ROAD, DERBY. Tel: 48266 (4 lines)

BRANCH WAREHOUSE: GROSVENOR ST., ASHTON under LYNE. Tel: 2816 (3 lines)



Suppository Compounds



Representatives :

Chemicals Trading Company Limited

102, Bishopsgate, London, E.C.2

NOW.. National advertising for **BABY WOOL**



Baby skin needs baby wool as soft and fine as this

Maw's superfine Baby Wool is blended and spun to airy softness. It is made specially for delicate baby skin. Baby Wool is handy and economical too, because it's 'Compak'd'—you pull off just the amount you want every time. Baby Wool is packed with scrupulous hygiene like all Maw's Nursery Products.

For baby—and you too—ask for the pretty blue Maw's pack; it's only 1/- from Chemists only.

Maw's BABY WOOL
S Maw Son and Sons Limited
Barnet
England

Baby skin needs finer baby wool

Maw's, the finest Baby Wool, is blended and spun to superfine softness. It is made specially for delicate baby skin. You'll feel the difference between Baby Wool and ordinary cotton wool at once; it's so soft and fine that it can't possibly chafe anywhere. Baby Wool is packed with scrupulous hygiene like all Maw's Nursery Products. For baby—and you too—ask for the pretty Maw's pack; it's only 1/- from Chemists only.

Maw's BABY WOOL
S Maw Son and Sons Limited
Barnet
England

Maw's superfine Baby Wool is both handy and economical because it's 'Compak'd'—you pull off just the amount you want every time.

THE BABY WOOL WITH THE FULL MARGIN


Display this new Maw's
Nursery Product **- NOW**

Check your stocks and order **- NOW**

Take your exceptional profit
including generous parcel
discounts **- NOW**

These attractive advertise-
ments are appearing in
national women's magazines
and special parent-appeal
journals creating high-
margin sales for you **- NOW**

*S Maw Son and Sons Limited
Barnet
England*



**products in
constant demand**

Literature and further infor-
mation available from the
Wholesale and Export Dept.,
BOOTS PURE DRUG CO. LTD.,
NOTTINGHAM, ENGLAND.
(Nottingham 45501.)

London Sales Office,
71 Fleet Street, E.C.4.
(Central 0111.)

PRODUCT	PACK	RETAIL PRICE
Alimex A palatable fluid preparation of alu- minium hydroxide and magnesium hydroxide.	8 fl. oz. 80 fl. oz. (dispensing pack)	2/1½ + 4½d. P. Tax 20/-
Fenox Nasal Drops Phenylephrine and naphazoline in a non-oily viscous vehicle of adjusted pH and tonicity.	½ fl. oz. dropper bottle	2/6
Ocusol Eye Drops A unique stable combination of sul- phacetamide and zinc sulphate in a buffered viscous vehicle.	½ fl. oz. dropper bottle 20 fl. oz. (dispensing pack)	3/- 67/6
Blandlax An oil-free laxative containing sodium carboxymethylcellulose and mag- nesium hydroxide.	8 fl. oz. 16 fl. oz. 80 fl. oz.	2/1½ + 4½d. P. Tax 3/10 + 8d. P. Tax 15/5 + 2/7d. P. Tax
Tabillin Penicillin Tablets, B.P. Each tablet individually packed and sealed in foil.	Packet of 10 Box of 10 packets of 10 Potency per tablet 100,000 I.U. 200,000 I.U. 400,000 I.U. 500,000 I.U.	Packet of 10 3/9d. 4/4½d. 8/- 10/- Box of 100 30/- 36/- 70/- 87/6d.
'Viules' Single-dose injections in disposable cartridges.	Details of range and prices on application.	

Prices subject to usual trade discounts.



LINK UP WITH THE BIGGEST DRY SHAVER ADVERTISING CAMPAIGN EVER

- ★ BIG space nation-wide press campaign.
- ★ BIG scale demonstrations at exhibitions and agricultural shows throughout the country.
- ★ BIG extra demand everywhere.

*So show and demonstrate
the 'Philishave'
at every possible opportunity*



The 'Philishave' is now available at the same price in this smart new case. Make an attractive display by showing it in your window and on your counter.

PHILIPS PHILISHAVE DRY SHAVER



THE DRY SHAVER WITH THE BIGGEST WORLD SALE!

RADIO & TELEVISION RECEIVERS • RADIOGRAMS & RECORD PLAYERS • LAMPS • GRAMOPHONE RECORDS ETC.

Philips Electrical Ltd., Century House, Shaftesbury Avenue, London, W.C.2

antipeol

THERAPEUTIC PREPARATIONS

Among the Medical and Nursing Profession and The First Aid Associations, the ANTIPEOL preparations enjoy a continued and growing popularity. ANTIPEOL Cutaneous Vaccine OINTMENT and its associated products RHINO-ANTIPEOL and OPHTHALMO-ANTIPEOL are highly regarded as **simple** but **effective** remedies against even the most virulent forms of skin, nose and eye infections. Wise chemists have been, and are still participating, in the steady sales increases over the years.

The success of these preparations is due to the incorporation into a proved healing ointment base, of the broth filtrates of the microbes common to most cutaneous, naso-pharyngeal and ocular complaints.

- **Antipeol**
Cutaneous Vaccine Ointment

Indications: Immediate efficacy in the treatment of BURNS and SCALDS. Invariably averts surgical intervention in the case of BOILS, whilst ABSCESSSES, ECZEMA, CARBUNCLES, VARICOSE ULCERS, HAEMORRHOIDS and certain types of DERMATITIS are equally responsive.

- **Rhino-Antipeol**
Prophylactic Immunising Cream

Indications: ASTHMA, BRONCHITIS, CATARRH, CORYZA, RHINITIS and many other infections of the naso-pharynx.

- **Ophthalm-Antipeol**
Therapeutic Immunising Ointment

Indications: BLEPHARITIS, CONJUNCTIVITIS, DACRIOCYSTITIS, KERATITIS and other inflammatory conditions of the eye.

The logo consists of the letters 'MBL' in a bold, sans-serif font, enclosed within a dark, shield-like border.

MEDICO-BIOLOGICAL LABORATORIES LTD
CARGREEN ROAD, SOUTH NORWOOD, LONDON, S.E.25

11^d
profit
on every
box

FAMILY PACK
(300 tissues) 2/9 each,
Trade 22/- doz.



4^d
profit
on every
box

BOUDOIR PACK
(100 tissues) 1/- each,
Trade 8/- doz.

You make
more profit on
ANDREX
Tissues

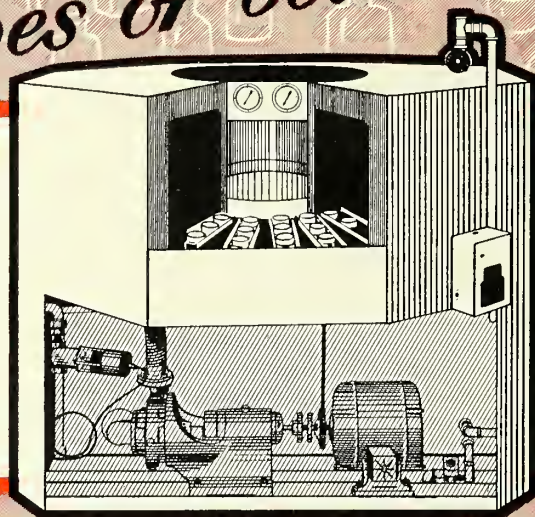
- they're bigger
and softer too.

The **APEX**® for cleaning all types of bottles!

Perfect hygiene and absolute cleanliness means everything in bottles. You're safe with "Apex". Simple, economical yet highly efficient, the "Apex" gives clear sparkling bottles from 25 doz. to 200 doz. per hour according to bottle size. Only one operator required.



Fullest details will be gladly sent.



R. POWLEY & SONS LTD., St. Mark's Road, SUNDERLAND

Tel. Sunderland 4846-7. Grams: "Powley" Sunderland.

Another leading line!

Bartletts
"PERFECT"

EYEBROW PENCILS

Entirely British Made

ATTRACTIVE DISPLAY CARDS
of 1 doz. 4/- plus Purchase Tax
RETAIL PRICE 10d. each. Order from your wholesaler

Wholesale enquiries to **THIS ADDRESS:**

Alfred Franks & Bartlett Co. Ltd.,
226/8, Grays Inn Rd., London, W.C.1 • TERminus: 9865-8



★ **REMEMBER TOO!**

The "Perfect" series of
Nail White Pencils.

*If personal service and faultless
workmanship are required*

U·M·P

is the answer

Have you contacted
U·M·P PLASTICS *for*
your requirements in
MOULDED PLASTIC CONTAINERS?



*For Tubes
and Plastics*

WHY NOT TRY THE
U·M·P

"THREE POINT"
WADLESS CLOSURE ?

- NO WASHER IN CAP
- NO LOOSE CAPS
AFTER FILLING
- A PERFECT CLOSURE

UNIVERSAL METAL PRODUCTS LTD.

SALFORD 6 LANCs. Telephone: PENDLETON 1631-2-3
LONDON OFFICE: ARGYLE HOUSE, 29/31, EUSTON ROAD, N.W.1. TEL. TERMINUS 2073

SILCOT — the towel they ask for "again and again"

Just ask those who sell Silcot! It's a fine quality cotton wool towel which not only sells again and again to satisfied users but can bring you extra discount, too. Read what retailers are saying about Silcot, and about the *extra discounts* they are getting under the Silcot Discount Plan:

GOOD QUALITY GOODS

"The credit note you sent is much appreciated. If a customer buys Silcot she invariably asks for them again and again. Good quality goods are the best advertisement."

Sherwood, Nottingham, 1st July.

NO SUBSTITUTES

"Your credit note for £2 0s. 10d. to hand... As one of your oldest customers in Northern Ireland we have no trouble in pushing Silcot towels. All our customers ask for them by name, and will have no substitutes."

Newtownards, Northern Ireland, 6th July

"SO NICE AND SOFT"

"Thank you very much for your credit note for £3 16s. 3d., being extra discount for the past six months under the Discount Plan. I must say I have no trouble whatever in selling Silcot towels; they are so nice and soft."

Dungannon, Northern Ireland, 7th July.

ACCENT ON SILCOT

"We thank you for extra discount... we can assure you the accent is on Silcot as far as we can make it so."

Southall, Middlesex, 29th May.



Millions of women read the Silcot advertisements every month in the leading magazines.

TWO SILCOT EXTRAS

EXTRA
COMFORT FOR THE
USER

EXTRA
PROFIT FOR THE
RETAILER

SILCOT

COTTON WOOL TOWELS

MACDONALD & SON LTD · HOPE MILLS · POLLARD STREET · MANCHESTER 4



A GOOD PRODUCT

that is

REGULARLY ADVERTISED

and brings you

REPEAT SALES.

Dirty Paws is now known as

IDP

Non-Gritty Hand Cleanser

KAY BROTHERS LIMITED, STOCKPORT

EPHAZONE

TABLETS

Rational, symptomatic treatment in
ASTHMA & BRONCHITIS

Each tablet contains Ephedrine, the important anti-spasmodic for bronchial spasm, Theobromine, for its relaxing effect on the bronchial muscle and for stimulation of the coronary circulation, Phenazone, for its soothing effect on the higher centres, and Calcium gluconate, a readily absorbable calcium salt, for diminishing capillary permeability and checking the secretion of mucus.

These active ingredients with complementary effects in bronchial asthma are presented in the following proportions in the 'EPHAZONE' Tablet:

Ephedrine			
hydrochloride	- - -	$\frac{1}{4}$	grain
Theobromine	- - -	$\frac{1}{2}$	grain
Phenazone	- - -	1	grain
Calcium gluconate	- -	$\frac{1}{4}$	grain

This preparation is sanctioned for prescription under N.H.S.

EPHAZONE LTD. 59 Brook St., London, W.1. Tel: Mayfair 5496



That the Diabetic may lead a **full** life . . .

The range of 'Wellcome' brand Insulins is designed to meet the needs of any diabetic person. It comprises—

Insulin, 20, 40 and 80 units per c.c., each in bottles of 5 and 10 c.c.
Globin Insulin (with Zinc), 40 and 80 units per c.c., each in bottles of 5 c.c.

Protamine Zinc Insulin, 40 units per c.c., in bottles of 5 and 10 c.c., 80 units per c.c., in bottles of 5 c.c.

Isophane Insulin (N.P.H.), 40 and 80 units per c.c., each in bottles of 10 c.c.

Insulin Zinc Suspension—Lente, 40 and 80 units per c.c., each in bottles of 10 c.c.

Insulin Zinc Suspension (Amorphous)—Semilente, 40 and 80 units per c.c., each in bottles of 10 c.c.

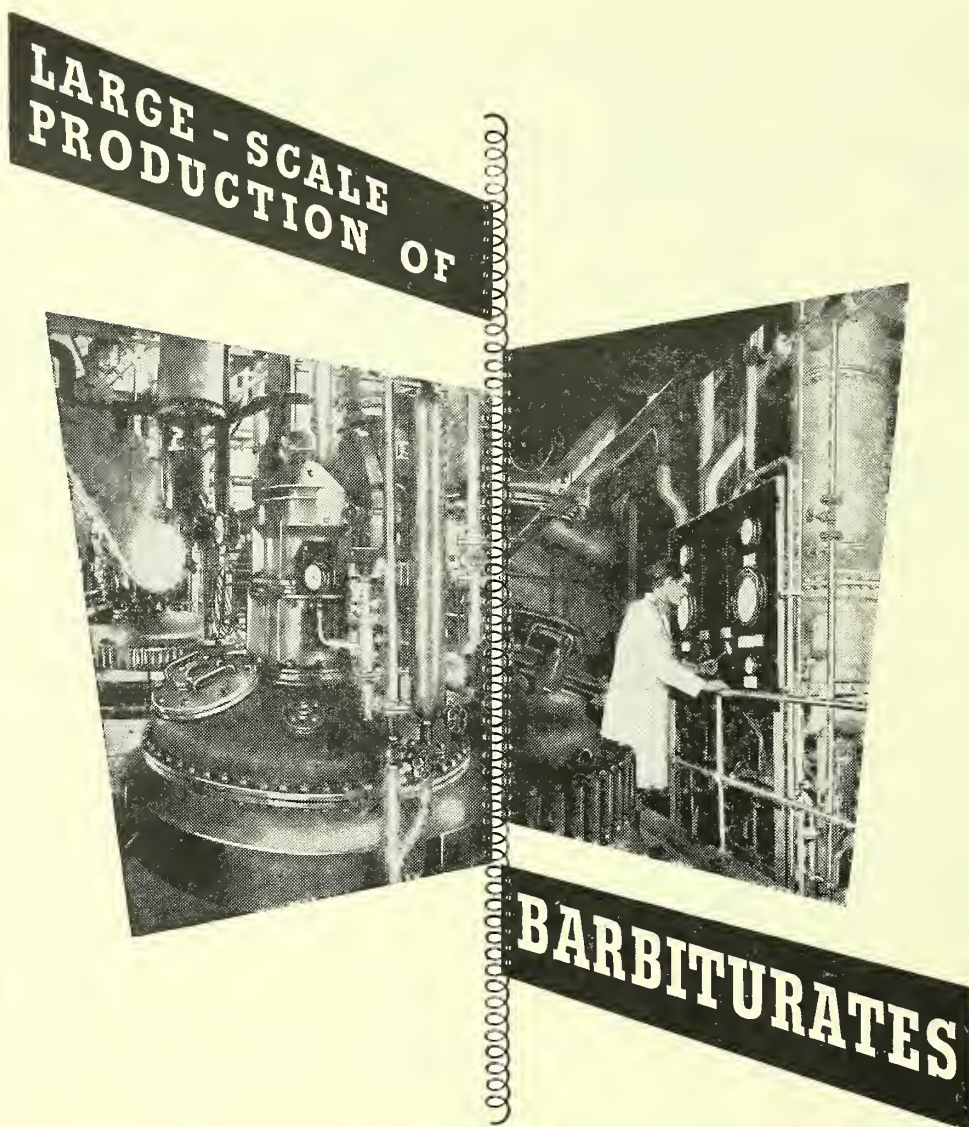
Insulin Zinc Suspension (Crystalline)—Ultralente, 40 units per c.c., in bottles of 10 c.c.

'WELLCOME' BRAND INSULINS

are made in Great Britain



BURROUGHS WELLCOME & CO. (THE WELLCOME FOUNDATION LTD.) LONDON



Scientifically controlled production in the latest type of plant enables GEIGY Barbiturates to be produced to exacting and invariable standards of quality. Continuous operation with the aid of constantly vigilant research and analytical laboratories provides Barbiturates by the ton in an ever expanding range.

Phenobarbitone B.P.

Barbitone B.P.

Butobarbitone B.P.C.

Amylobarbitone Sodium B.P.C.

Cyclobarbitone Calcium

Methylphenobarbitone B.P.

Phenobarbitone Sodium B.P.

Barbitone Sodium B.P.

Amylobarbitone B.P.C.

Cyclobarbitone B.P.C.

Hexobarbitone B.P.

Quinalbarbitone Sodium B.P.



PHARMACEUTICAL LABORATORIES GEIGY LTD.

Rhodes,

Middleton,

MANCHESTER.

F.C.16

"Skylon" TIME

... all the time

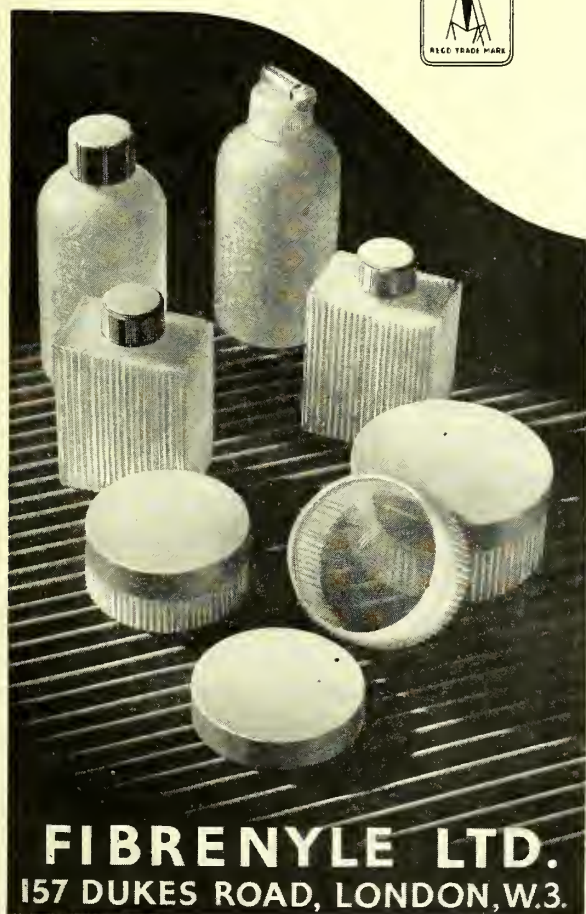


The seasons come and go—fashions too are changeable but the "SKYLON" range of Polythene bottles and jars, a few are illustrated below, are designed to suit all tastes in all seasons and are in constant demand throughout the year—so—make sure you have ample stocks at all times—order from your Wholesaler now.



If there is any difficulty in obtaining what you require apply direct to the Manufacturers ...

ACORN 5073



FIBRENYLE LTD.
157 DUKES ROAD, LONDON, W.3.



THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 162

July 31, 1954

No. 3884

CONTENTS

A Drug Factory at Bombay	...	124
Conference Science Papers...	...	109
Echoes of the Past ...	...	117
Equipment and Accessories	...	112
Hospital Pharmacy Forum ...	...	121
Italian Quicksilver ...	...	124

Leading Articles:—

The Authorities and Averaging	...	117
Greater Competition in Road Transport	...	117
Medical Uses of Radioisotopes	...	114
New Products and Packs	...	113
Onward from Galen	...	118
Pharmacies of Britain—26	...	115
Photographic Notes	...	113
Photographic Studies Course	...	122
Prescription Problem	...	121
Substance "M"	...	120
Topical Reflections	...	107

Business Changes	...	110	News of the Week	...	105
Coming Events	...	126	P.A.T.A.	...	126
Company News	...	110	Personalities	...	110
Correspondence	...	119	Price Changes	...	126
Deaths	...	111	Print and Publicity	...	126
Information Wanted	...	116	Scottish News	...	106
In Parliament	...	108	Trade Marks	...	126
Irish News	...	107	Trade Notes	...	112
Legal Reports	...	110	Trade Report	...	125
Marriages	...	111	World Trade	...	124

INDEX TO ADVERTISERS, Pp. 5 & 6.

EDITORIAL AND PUBLISHING OFFICES

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telephone: Central 6565

Telegrams: Chemicus, Estrand, London

Branch Offices:

BIRMINGHAM, 2: 111 New Street.

Phone: Midland 2921

GLASGOW: 24 Dixon Road, S.2. LEEDS, 6: 32 Wynford Rise.

Phone: Pollock 4802 West Park. Phone: Leeds 78438

ANNUAL SUBSCRIPTION, which includes The Chemist and Druggist Diary and Year Book, £2. Single copies one shilling each.

NEW ANTICHOLINERGIC AND SPASMOLYTIC

ANTRENYL

A product of original CIBA research

For the Rapid Relief of GASTRO-INTESTINAL PAIN

Particularly in PEPTIC ULCER

and other conditions associated with hypermotility or spasm.

Well tolerated in the usual therapeutic doses

Available in tablets containing 5 mg.

2-diethylaminoethyl- α -cyclohexyl- α -phenylglycollate methobromide

Bottles of 25 (5s. plus 10d. P.T.), 100 (18s. plus 3s. 0d. P.T.),
and 500 (87s. plus 14s. 6d. P.T.)

Subject to the usual discounts

CIBA

'Antrenyl' is a registered trade mark : Reg. user

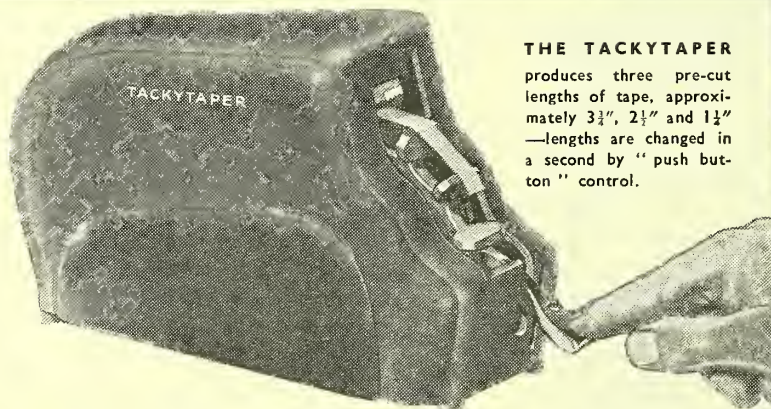
CIBA LABORATORIES LIMITED • HORSHAM • SUSSEX

Telephone : Horsham 1234

Telegrams : Cibalabs, Horsham

1/4

PRESS BUTTON PACKING & PACKAGING



THE TACKYTAPER

produces three pre-cut lengths of tape, approximately 3½", 2½" and 1½" —lengths are changed in a second by "push button" control.



BUTTERFLY BRAND

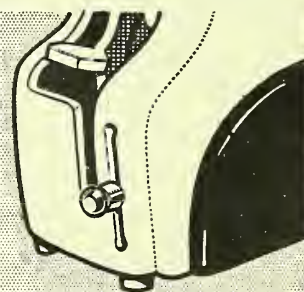
Sturdily constructed for use in Warehouse or on production line. Positive repeat action handles Butterfly Brand (regd.). Cellulose Tape from ¼" to 1" wide.

PRICE £7 - 10 - 0

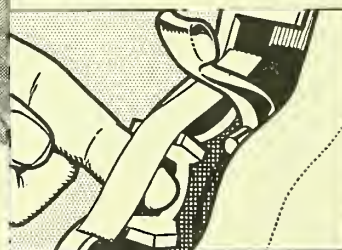
Please send for leaflet 3040 PW or ask for demonstration.

TACKYTAPER *for use with* **BUTTERFLY BRAND^{Regd.} CELLULOSE TAPE**

SAMUEL JONES & CO., LTD NEW BRIDGE STREET, LONDON, E.C.4. CEN. 6500



3 LENGTH CONTROL



FINGERTIP APPLICATION

The CHEMIST AND DRUGGIST

Volume 162

JULY 31, 1954

No. 3884

Gold Medal for B₁₂ Pioneer

APOTHECARIES SOCIETY'S AWARD

DR. E. LESTER SMITH (senior biochemist, Glaxo Laboratories, Ltd.), who in May 1948, simultaneously with workers in the United States, discovered vitamin B₁₂, was presented with the gold medal in therapeutics of the Worshipful Society of Apothecaries, in London on July 20.

The citation, which was given by Sir Lionel Whitby, in the Great Hall of the Society, referred to Dr. Lester Smith's "fundamental contribution in connection with vitamin B₁₂." In his early years with the company Dr. Lester Smith was principally engaged in research on the production of vitamin D and of vitamin concentrates. In 1938 he began the research that was to result in the isolation of vitamin B₁₂. The work was interrupted during the war when Dr. Smith transferred to penicillin research, but it was resumed shortly after the end of hostilities. By that time partition chromatography had been evolved and was used in the final stages of the search. Dr. Lester Smith has since continued his work on the chemistry of vitamin B₁₂ and more recently has carried out research on the incorporation of radioactive isotopes into vitamin B₁₂ and penicillin.

Among the many famous scientists who have received the Society's gold medal are Sir Frederick Gowland Hopkins, who won the Nobel prize in medicine for the discovery of vitamin D; Sir Frederick Banting, the discoverer of insulin; and Sir Alexander Fleming and Sir Howard Florey.

The obverse of the medal shows the bust of Galen looking to the left with the word Galen to the left. The design is by T. H. Paget after William Wyon. The reverse shows a seated female figure representing science instructing a youth seated by her in the properties of herbs. To the right is seen a vase containing herbs and flowers, and to the left, a pharmacist's oven; in a space below, the emblems of Aesculapius (god of healing) are shown.

METHYLPENTYNOL

"Prescription only" advice

IN a statement issued on July 28, the Council of the Pharmaceutical Society points out that it "views with increasing anxiety the notices given to methylpentynol and its applications in various newspapers. While the final place in therapy is still uncertain, the danger of indiscriminate use or use in excessive quantity are substantial and the

opinion of the Council is that methylpentynol should be available on medical or dental prescriptions only. The Council accordingly advises members to supply the drug only on that basis."

DUTY-FREE MACHINERY

Restricted system recommended

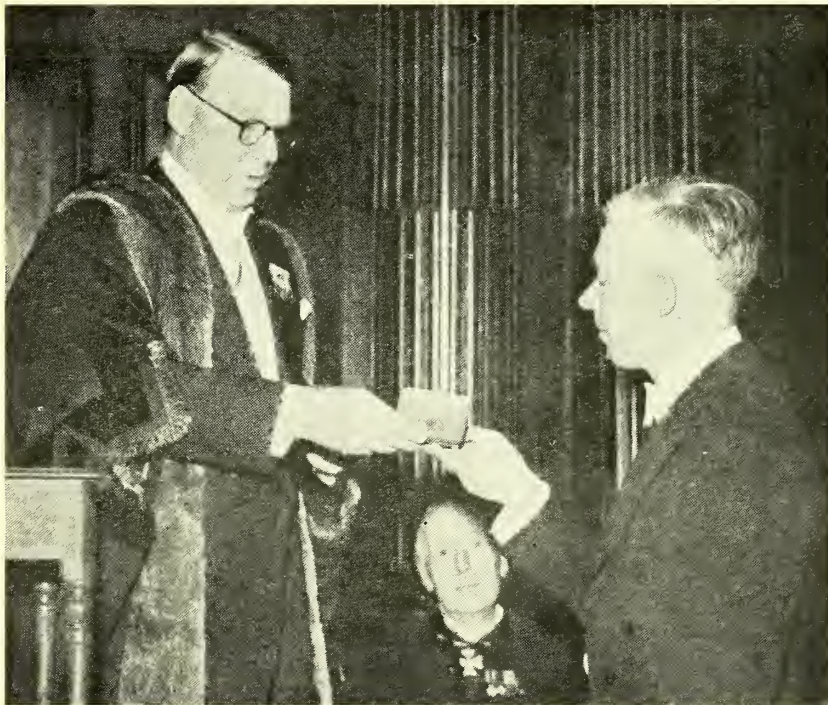
THE committee on the duty-free entry of machinery (see *C. & D.*, July 17, p. 52) has recommended the continuation, on a restricted basis, of the system in force since 1932, under which certain machinery is allowed to be imported into the United Kingdom free of import duties. In its report, published on July 22 (H.M. Stationery Office, price 1s. 3d.), the committee states that the real case for duty-free entry in the national interest applies "only to a limited field of machinery

imports." Under the present system, however, more than 1,000 applications for licences have had to be considered each month, and the administration of the scheme has been expensive. The committee recommends, therefore, changes in the administrative procedure and the raising of the minimum value of a consignment for which application for duty-free entry can be made from £100 (the level set in 1947) to £2,000.

TRUSS FITTERS

Training and registration scheme

THE Institute of British Surgical Technicians has formed a council to administer a scheme of training and certifying abdominal hernia appliance fitters. Arrangements have been made in most regional areas in Britain for the training, examination, certification and registration of persons wishing to become abdominal hernia appliance technicians. An applicant may be granted a certificate provided that (a) he passes an examination by the Institute's appointed examining board, showing that he possesses the necessary anatomical knowledge and technical skill for fitting abdominal hernia appliances; and (b) he undertakes to observe the Institute's ethical code. The course



MEDAL FOR BRITISH DISCOVERER OF VITAMIN B₁₂: Dr. Lester Smith receives the gold medal of the Worshipful Society of Apothecaries from the Master (Dr. Seaward Morley).

of training consists of eight lectures. The first series is being held at Chelsea Polytechnic, Manresa Road, London, S.W.3, commencing on September 28, followed by an examination on November 27. Lectures are being arranged at other centres according to demand. Inquiries should be addressed to the Registrar, Institute of British Surgical Technicians, 6 Holborn Viaduct, London, E.C.1.

TECHNOLOGY

Royal charter for colleges ?

IN a memorandum on higher technological education, issued on July 26, the Parliamentary and Scientific Committee advocates the establishment of Royal Chartered Colleges of Technology with the right to award degrees. The committee is an unofficial group of Members of both Houses of Parliament and representatives of scientific and technical institutions. The report says that the number of qualified engineers and other technologists being trained in Britain compares unfavourably with other industrially progressive countries, such as Switzerland, Germany and the United States. The report suggests that up to twenty of the existing colleges of technology might be considered eligible for charters. Those colleges should prove an invaluable supplement to the universities in providing the highly qualified technologists the country needs. They should offer advanced full-time "sandwich" courses, part-time day and evening courses, post-graduate courses, and facilities for research on a full-time and part-time basis. The colleges should require high qualifications for entry. They should have strong governing bodies and complete financial independence on a quinquennial basis like the universities. They should award the degree of Bachelor of Technology.

The committee considers that there is still scope for greater co-operation between industry, the universities, and the technical colleges. The universities should consider doing more sponsored research. There should be increased use of teaching staffs as consultants in industry and of industrialists as part-

time or temporary whole-time teachers in universities and technical colleges.

POLIOMYELITIS

Local outbreaks

FIVE cases of poliomyelitis were confirmed in Ipswich, Suffolk, recently. A spokesman of the town's public health department said on July 22 that there was an "increasing number" of suspects, all young children. In the surrounding district, one case has been confirmed and two suspected cases are under observation. A woman died from poliomyelitis in Weymouth, Dorset, on July 25. Two children out of her family of three were ill with the same disease on July 26. A naval lieutenant died from poliomyelitis in Malta on July 27. Two other cases of the disease are reported from the island.

TYROS AND VETERANS

Joint celebration at Leeds

120 pharmaceutical apprentices of Timothy Whites & Taylors, Ltd., visited Leeds on July 6 to compete for the company's annual scholarship examination. Their two-day visit included a tour of the company's offices, warehouses and factory, together with a social and dance. At the social on July 6 a number of long-service presentations were made to employees of the company, the men with forty years' service receiving £100 and the women with twenty-five years' £50 each, tax-free.

PHARMACISTS' UNION

AT a recent meeting of council of the Registered Pharmacists' Union a further increase in membership of the Union was announced. A member of council gave a *résumé* of the result of his researches into pharmaceutical literature of the past half-century. He stated that between 1900 and 1940 the literature showed an increasing number of complaints from employed pharmacists that they were overworked and underpaid; in latter years there still remained a considerable volume of letters complaining of the poor salaries paid in the hospital service. Comparison of the pharmaceutical literature

with that relating to another body of professional workers showed that, in the past, pharmacy's weakness had lain in lack of adequately co-ordinated negotiating machinery. There was a need to remind pharmacists that their strength lay in combined action. THE SECRETARY reported that he had taken steps to draw the attention of newly qualified pharmacists to the benefits of Union membership. From information supplied by various members it appeared that rota payments were a matter calling for immediate co-ordinated effort and he would be glad to hear from any pharmacist on that matter. Letters should be sent to the Registered Pharmacists' Union, 28 Great Queen Street, London, W.C.2, and would be treated as confidential.

DEARER TELEGRAMS

THE Postmaster-General announced on July 24 that new charges for inland telegrams are being introduced on August 1. At the same time an overnight telegraph service is being inaugurated. An ordinary inland telegram will cost 3s. for twelve words and threepence for each additional word.

COURSES AT CHELSEA

COURSES of study for the internal degree of Bachelor of Pharmacy of London University are provided by the Chelsea Polytechnic, Manresa Road, London, S.W.3, in addition to the institutions listed in the C. & D., July 24, p. 97.

SCOTTISH NEWS

WELFARE FOODS PROTEST

ARGYLL County Council are protesting to the Secretary of State for Scotland about the distribution of welfare foods becoming the responsibility of the local authority and being partly charged to them. It is estimated to cost between £1,600 and £2,000 a year to run the county scheme, for which the council will receive a 50 per cent. grant.

SHILLING LEVY UNKNOWN

AT a recent meeting of the Shetland Executive Council, a letter was read



SCHOLARSHIP ASPIRANTS: Apprentices of Timothy Whites & Taylors, Ltd., in Leeds to compete for the company's annual scholarship examination, photographed with directors and territorial general managers. Photo, "Yorkshire Evening News."

from the Local Medical Committee, stating that, in the Committee's opinion, the shilling charge for prescriptions had received insufficient publicity and that many people did not know that the charge must be paid. It was agreed to publish the letter.

IRISH NEWS BENEVOLENT FUND

AT a meeting of the Northern Ireland Chemists' Benevolent Fund committee on July 8 the treasurer reported that among donations recently received were £12 5s. 6d., the proceeds of a bowling tournament organised by Mr. J. Caldwell, and £25 from the Ulster Chemists' Association, the proceeds of a whist drive. Grants amounting to £110 were made.

GAELIC FOOTBALL

THE College of Pharmacy Gaelic Athletic Association football team beat Kickhams in a senior league match at Parnell Park on July 18. The pharmacists scored 2 goals 11 points against Kickham's 3 goals 4 points.

NEWS IN BRIEF

THE officers, Council and members of the Pharmaceutical Society have sent an address of congratulations and good wishes to the Royal Horticultural Society on the one hundred and fiftieth anniversary of its foundation.

DR. H. KENNETH COWAN (medical officer of health for Essex) has been appointed Chief Medical Officer of the Department of Health for Scotland in succession to Sir Andrew Davidson.

SPORT

Billiards.—SHEFFIELD PHARMACY CLUB. Competition for the billiards trophy for 1953-54 was won by A. L. Manton.

Bowls.—ULSTER CHEMISTS' BOWLING ASSOCIATION v. SCOTTISH CHEMISTS' BOWLING ASSOCIATION at Watfield Green, Ayr, on June 23. Results: Scotland, 78; Northern Ireland, 53. The best Scottish rink was skipped by A. McKinlay and the best Northern Ireland rink by J. Caldwell (captain, Ulster Chemists' Bowling Association). Mr. Caldwell presented Mr. J. L. Thompson (captain of the Scottish Association) with a shillelagh, and the Scottish team with Irish linen handkerchiefs, and Mr. Thompson presented Mr. Caldwell with a brass tray.

ULSTER CHEMISTS' BOWLING ASSOCIATION. Match played at Belmont bowling club, Belfast, on July 7. Belmont won the game by 30 shots.

Golf.—LONDON CHEMISTS' GOLFING SOCIETY. At West Surrey golf club, Godalming, Surrey, on July 18. Medal competition for the Morny prize, bogey competition for the vice-captain's prize, and the ladies' competition for the President's prize. Results: *Medal Competition:* 1, R. L. Taylor (18), 78 net; 2, C. H. Maile, 78 net; 3, E. G. Nice, 79 net; 4, J. G. Catto, 80 net. *Bogey Competition:* 1, J. G. Catto (10), 2 down; 2, C. H. Maile, 5 down; 3, E. G. Nice, 6 down. *Ladies' Competition:* 1, Mrs. Taylor.

IRISH CHEMISTS' GOLFING SOCIETY. At the Castle Golf Club, Rathfarnham, co. Dublin, on July 14. Match to play for prizes presented by Proprietaries (Eire), Ltd., and Harwood Brothers, Ltd. Eighteen hole strokes competition results: 1, T. J. Lynch (5) 70; 2, M. L. Cashman (9) 71. Eighteen hole bogey competition results: 1, S. J. Savage (6) all square; 2, J. Murray (9) 1 down. Prizes were presented by Mr. Percy Harwood on behalf of both companies.

Snooker.—SHEFFIELD PHARMACY CLUB. Competition for the G. K. Greenstreet trophy for 1953-54 was won by D. J. Tomlinson.

TOPICAL REFLECTIONS

By Xrayser

Late Hours Service

You draw timely attention (p. 86) to patients' difficulties in having prescriptions dispensed after normal hours, and your opinion that "sooner or later the demand for greater certainty of getting a prescription dispensed after hours will become too insistent to be overlooked" seems to be a fair statement on present evidence. Two weeks before your report of the Wolverhampton complaint (June 26, p. 638) you recorded that in London 300 pharmacies gave service until 7 p.m., and of those fifty opened until 8 p.m. or later (June 12, p. 592). Yet the London Executive Council reported at their last meeting that three borough councils had questioned the adequacy of the present arrangements. Branch Representatives decided that keeping open a shop after normal hours was unethical conduct, but many agreed that any rota service must be adequate for public needs, and that pharmacists should be prepared to give the service necessary (May 29, p. 544). I endorse your conclusions that chemists may be faced with a choice between having longer hours officially imposed upon all contractors or organising voluntarily an extension of rota hours by means of a late night service provided jointly by local contractors, and I suggest that the initiative in this matter should be taken while there is time.

Drug Dangers in the Home

The danger to children of leaving medicines in attractive forms within their reach has received recently—and rightly—considerable attention from those alive to the risks involved. The difficulty is to impress parents and householders generally with the gravity of the situation. Speaking on this matter, Mr. F. C. Wilson (p. 73) referred also to the practice at some council clinics of supplying medicines in envelopes and bags. Your report of the May meeting of the London Pharmaceutical Committee includes a note about this (June 12, p. 592). Several useful articles on poisoning by drugs, chiefly among children, were contained in your issue for May 16, 1953. The question of the disposal of stocks of unwanted medicines stored up in many homes was raised by the Queen's Institute of District Nursing in Wales, and medical advisers of the Ministry of Health then suggested those methods for adoption (with the consent of the householder) by nurses who find surplus drugs in any houses visited. All Dangerous Drugs, opened or unopened, and all partly used or opened bottles or packages, should be destroyed. Other unopened bottles or cartons might be handed to the local medical officer of health for transfer to a neighbouring hospital if found suitable.

Lethal and Stimulating

A recent crossword clue attributing stimulating properties to sassafras stimulated me to make further inquiries. One dictionary described it as a powerful stimulant, while another, more cautious, stated that it was used in medicine. I think you have made no particular reference to it since you described it (*C. & D.*, December 12, 1929, p. 798) in the *C. & D.* "Commercial Compendium" included in your issues from 1924 to 1932. In 1935 (June 22, p. 770) you warned a correspondent about the risk of using the oil for dogs, in mixture or application, and, of course, you have periodically quoted prices for it in your Trade Report. Sassafras wood and oil were official in the British Pharmacopœia, 1898, and the oil still is official in the United States Pharmacopœia. Gerard knew it as the "Ague Tree." "Best of all is the root, water being sodden with it, drunk several daies together, helpeth the dropsie, removeth stopping of the liver and cureth agues." At the modern end of the scale the British Pharmaceutical Codex credits the wood with mildly aromatic and carminative properties, while the oil is rubefacient and is used to destroy pediculi. My chief recollection of dispensing it, in fact—now many years ago—is for that purpose. In "Pharmaceutical Formulas" you give the composition of no less than five preparations of sassafras.

IN PARLIAMENT

BY A MEMBER OF THE PRESS GALLERY, HOUSE OF COMMONS

MR. DOUGLAS HOUGHTON asked the Minister of Health on July 22 what research was being carried out on migraine. MR. IAIN MACLEOD (Minister of Health) said that he understood that a clinical trial of remedies used in migraine was being undertaken at one centre, and that headaches of various types were being investigated empirically at a number of others. MR. HOUGHTON said that there was an increasing interest in the disease, and that different opinions were expressed by medical writers on its causes and treatment. Was there anything the Ministry could study or extend in the work of the migraine clinic at the Putney health centre? MR. MACLEOD said that he would be glad to examine that experiment. There was much work going on, mostly by the Medical Research Council.

Medicines for Private Patients

MR. J. T. HALL asked the Minister of Health on July 22 if, in view of the disagreement between the British Medical Association and the Central Health Service Council's Committee on General Practice on the question of the free issue of medicines to private patients, he would make a statement. MISS P. HORNSBY-SMITH (Parliamentary Secretary, Ministry of Health): The Minister would not feel justified in proposing any amendment of the National Health Service Acts in that matter. MR. HALL then asked whether it was not unjust that a citizen should be denied the right to a service for which he had paid? MISS HORNSBY-SMITH: The difficulty is that of trying to exercise control over excessive prescribing if doctors are not also providing general medical services.

Over Prescribing

MISS P. HORNSBY-SMITH (Parliamentary Secretary, Ministry of Health), replying to MR. R. G. PAGE on July 22, said that the cost of investigations into excessive prescribing in the past twelve months was under £15,000, and during the period eight cases were referred by the Minister to Local Medical Committees. She added that 200 doctors had been interviewed by regional medical officers on the subject, and there had been an estimated saving of £300,000. It was only in extreme cases in which a doctor refused to co-operate that there was a reference to the Committee, and that accounted for the low number of eight. She stated in another reply that during the past twelve months the Minister had directed the withholding of a total of £500 from three doctors in partnership. Independent referees estimated the excess cost of their prescribing to be £232 in one month, and remarked that they appeared to have been over-prescribing for a long time.

An American Proprietary

BRIGADIER F. MEDLICOTT asked the Minister of Health on July 22 if supplies of the American preparation Hydrosulphosol could be made available. MISS P. HORNSBY-SMITH (Parliamentary Secretary, Ministry of Health)

replied that the Minister was not aware of any general demand by the medical profession for the substance in Britain, where preparations with similar therapeutic effect were available at a fraction of the cost. BRIGADIER MEDLICOTT asked whether she could explain why it was that in a recent case (see *C. & D.*, July 3, p. 2) in order to provide a single prescription under the Health Service a supply of that preparation was obtained from America at a cost of over £130. MISS HORNSBY-SMITH replied that she could sympathise with his complaint, but the fact that the information became public was due to the vigilance of the particular committee in having the matter investigated. MR. J. W. SNOW: Will you guard against those continuous and rather ambitious claims from America concerning new drugs, the results of which do not always bear out the individual claims?

Poliomyelitis Vaccine

MR. E. H. C. LEATHER asked the Minister of Health on July 22 if he was aware that a successful anti-poliomyelitis vaccine had been developed in South Africa and if such a vaccine would soon be available in Britain. MISS P. HORNSBY-SMITH (Parliamentary Secretary, Ministry of Health): No. The Minister is aware of attempts to produce a satisfactory vaccine in South Africa and elsewhere and similar investigations are in progress in Britain. The experiments are expected to be protracted.

Health Service Reciprocity

MR. IAIN MACLEOD (Minister of Health) told SIR G. LLOYD on July 22 that full reciprocity with any other country in medical assistance for British nationals visiting those countries was not at present practicable since no other country provided for its own nationals a health service comparable with the British. The Brussels Treaty countries had a reciprocal agreement for giving medical assistance to indigent persons and a Convention extending that arrangement to all members of the Council of Europe had recently been signed. Arrangements were also in force whereby British subjects employed in France and Italy, and their families, participated in the social insurance schemes of those countries; a similar agreement with Luxembourg had been signed, and agreements with Austria, Belgium, the German Federal Republic and the Netherlands were being negotiated. It was not possible to negotiate an agreement with Canada since no comparable service at present existed in that country.

Food and Drugs Amendment Bill

During the second reading of the Food and Drugs Amendment Bill on July 23, SIR HUGH Linstead (a secretary of the Pharmaceutical Society) said that he hoped that food and drugs legislation would not be left in the condition in which it would be in when the Bill had been passed. He hoped that

the present amending Bill would be followed by consolidation. DR. C. HILL (Parliamentary Secretary, Ministry of Food) replying later, said that the answer to the question was yes.

SIR HUGH said that the Bill repeated the old structure of food and drugs legislation, and he wondered whether it was wise to try to combine food and drugs, which except in the matter of administration did not fall into the same class. Some original thought ought to be given to the question of drugs administration. It should also be considered whether the Minister of Health rather than the Minister of Food—or his successor—should be the Minister primarily responsible for food standards as he was for drug standards. The Bill would leave a very uncertain balance between the central authority and the local authorities. The regulations would be made by the Minister but there would still be 365 administering authorities, each one of which might make its own prosecutions in its own area, no longer having to go to the Minister for consent as it had to do now in certain cases. As a result, different standards over such matters as labelling might be set by different magistrates' courts.

In overlapping between the provisions of the food and drugs legislation and the by-law-making powers of local authorities, he thought that it should be considered whether, having got a national code, it should not be made unlawful for local authorities to take powers in subsequent private Bills that would enable them slightly to modify the national code and create uncertainty.

Speaking of the provisions affecting drugs, he said he wished to draw attention to the fact that in whereas the Minister was taking power to prescribe statutory standards for food in addition to the power which he already had, he was not taking power to prescribe statutory standards for drugs, and it was worth drawing attention to the fact that Britain was probably the only civilised country which had not statutory power over most of its drugs and medicines. The only standards were presumptive and they had to be proved by reference to the customs of the trade. Even the British Pharmacopoeia had no statutory standards in Britain.

He noticed that the old defence in the 1938 Act for proprietary medicines had disappeared. There was a curious provision in that Act which said that it was a defence for a seller who was challenged, under the Food and Drugs Act, on proprietary medicines, to plead that what he had sold was what he was asked for. That disappeared. On the whole he thought that it was a good thing but he knew that certain manufacturers of proprietary medicines were concerned that they were losing a defence which might have some value for them.

He thought it a pity that the Minister had excluded biological analyses. If there were not enough laboratories he thought the Minister of Health

should consider the provision of facilities.

There was power under Clause 5 to control the advertising of food, but that was not extended to drugs. He realised that if it were extended to drugs and medicines it would be an extremely hot provision to hold for any Minister. But it was worth while drawing attention to that gap in the law.

A number of chemists' shops would sell food—invalid foods, and articles such as olive oil—which strictly were caught by the food provisions of the Bill. They would therefore turn their establishments into food establishments. If that was so, there was a danger of an overlapping administration because the Pharmacy Acts provided for the inspection of chemists' shops. He hoped that there would be some way of making it unnecessary to have food and drugs inspectors as well as Pharmacy Acts inspectors doing the same job in chemists' shops.

Among representations which had come to him was a complaint, which seemed to have some force, that the sample provisions did not require that a sample should go to the manufacturer. Very often the manufacturer of an article, particularly a food, was not the person really responsible for the condition of that product. It was unreasonable that the manufacturer, whose whole reputation might be at stake, should not receive a sample of

a suspected food just as quickly as the retailer, who acted more or less as a post office for passing the product to the consumer.

Replying to the debate DR. HILL said that it was possible to argue that to leave local authorities to administer the food and drugs legislation was necessarily to run the danger of varying standards but he believed that on balance it was best to continue to place almost the whole of the responsibility on local authorities. In the collection of information under Clause 4 and in the matter of prosecutions in respect of the composition and labelling of food, the Minister was permitted, where the general interests of consumers as a whole were concerned, to take action rather than to leave it to the individual action of local authorities.

The Government's attitude on labelling had been that the trade and industries concerned might well themselves set up machinery to replace the central advisory service.

The Bill was given a second reading.

Trade with Soviet Bloc

In a statement on July 26 about the revision of the strategic controls on exports to countries of the Soviet bloc in Europe (see *C. & D.*, July 17, p. 50), MR. PETER THORNECROFT (President of the Board of Trade) announced that from August 16 the present embargo list would be reduced

by one-third, from about 250 to 170 items, and the quantitative control list would be "drastically cut" from 90 to 20. A further sixty items would be kept on a watch list so that the trend of those exports could be followed. [It is understood that some plastics and some chemicals were included in the "watch list."—EDITOR.] "The overall result," said Mr. Thorneycroft, "will be a substantial increase in the area of permitted trade, which will at the same time be fully compatible with the needs of national security." He hoped to be able to publish the revised control lists, but some problems of definition remained to be worked out and that would have to be considered with the other countries concerned. Meanwhile, any interested exporter who wished to know whether a licence would be granted for a particular product would be able to obtain information from the export licensing branch of the Board of Trade or from the production department. An order imposing control over merchandising transactions with the Soviet bloc would be laid before the House of Commons soon.

The Lords' amendments to the Television Bill were agreed to in the House of Commons on July 27.

The Television Bill was given its third reading in the House of Lords on July 22, and passed. The Pharmacy Bill received its third reading in the House of Lords on July 26.

CONFERENCE SCIENCE PAPERS

THE following papers are being read at the Science Sessions of the ninety-first meeting of the British Pharmaceutical Conference, Oxford, September 13-17.

Tuesday morning, September 14

1. STABILITY OF INJECTION OF SUCCINYLCHOLINE CHLORIDE. *M. P. Earles, G. E. Foster, Beryl L. Hardstone, G. A. Stewart.*
2. SPECTROPHOTOMETRIC DETERMINATION OF VITAMIN D IN PHARMACEUTICAL PREPARATIONS. PART I. SOLUTION OF CALCIFEROL B.P. *A. R. Rogers.*
3. ACTIVE CONSTITUENTS OF RASPBERRY LEAVES. A PRELIMINARY INVESTIGATION. *A. H. Beckett, F. W. Belthle, K. R. Fell, M. F. Lockett.*
4. A STUDY OF THE PHARMACOPCEIAL METHOD FOR THE PREPARATION OF SOLUTION OF CHLOROXYLENOL. *J. B. Lloyd and Barbara W. Clegg.*
5. REACTION OF AROMATIC ALDEHYDES WITH PHARMACEUTICAL AMINO COMPOUNDS. PART I. *C. G. Butler and P. H. B. Ingle.*
6. EMULSIFYING PROPERTIES OF POLYETHYLENEGLYCOL ETHERS OF CETOSTEARYL ALCOHOL. *J. W. Hadgraft.*
7. A RHEOLOGICAL STUDY OF THE EFFECT OF BENTONITE ON HEATED EMULSIONS. *Arnold Axon.*

Tuesday afternoon, September 14

8. A STATISTICAL STUDY OF VARIATION IN SURGICAL DRESSINGS. *R. Maxwell Savage.*
9. BACTERICIDAL ACTION OF VOLATILE SUBSTANCES. PART I. DISINFECTION OF POWDERS CONTAINING SPORES,

BY MEANS OF GASEOUS FORMALDEHYDE. *Kenneth Bullock and E. A. Rawlins.*

10. VALUE OF ADSORBENTS FOR DETECTING SURVIVAL IN BACTERIAL POPULATIONS EXPOSED TO PHENOLS. *S. E. Jacobs and N. D. Harris.*
11. ASSAY OF TINCTURE OF DIGITALIS AND OF THE GLYCOSIDES OF DIGITALIS PURPUREA. *H. Brindle, G. Rigby and S. N. Sharma.*
12. OBSERVATIONS ON THE AGEING OF DIGITALIS TINCTURES. *F. Fish and J. P. Todd.*
13. A METHOD FOR STUDYING PERCUTANEOUS ABSORPTION IN THE RAT. *J. W. Hadgraft and G. F. Somers.*

Wednesday morning, September 15

14. APPLICATION OF INFRA-RED SPECTROSCOPY TO PHARMACEUTICAL ANALYSIS. *D. C. Garratt and P. G. Marshall.*
15. LEUCOCYTE RESPONSE IN THE RABBIT TO PYROGEN FROM *PROTEUS VULGARIS*. PART II. NEUTROPHIL AND TEMPERATURE RESPONSES. *W. Anderson and J. P. Todd.*
16. PHOTOMETRIC DETERMINATION OF QUATERNARY AMMONIUM SALTS AND OF CERTAIN AMINES BY COMPOUND FORMATION WITH INDICATORS. PART I. QUATERNARY AMMONIUM SALTS. *C. W. Ballard, J. Isaacs, P. G. W. Scott.*
17. SYNTHETIC ANALGESICS: STEREOCHEMICAL CONSIDERATIONS. *A. H. Beckett and A. F. Casy.*
18. ASSAY OF BENZATHINE PENICILLIN BY TITRATION IN NON-AQUEOUS SOLVENT. *C. Knight and W. H. Stephenson.*

19. CHEMISTRY OF ARISTOLOCHIA SPP. I. THE PETROL-SOLUBLE FRACTION FROM ARISTOLOCHIA RETICULATA. *J. B. Stenlake and W. D. Williams.*

Friday morning, September 17

20. DEMINERALISED WATER FOR PHARMACEUTICAL PURPOSES. *L. Saunders.*
21. ENTRAINMENT OF LIQUID DURING DISTILLATION. *E. Shotton and A. F. S. A. Habeeb.*
22. STABILITY OF AQUEOUS SOLUTIONS OF FERROUS GLUCONATE. *C. A. Johnson and J. A. Thomas.*
23. STABILITY OF SUGAR-COATED PENICILLIN TABLETS. *F. W. Ashby, P. W. Muggleton, F. Taylor and W. A. Woodard.*

Symposium Session

Thursday morning, September 16

The subject for discussion at the Symposium Session is TABLETS. The discussion is being opened by three speakers as follows:—DISPENSING ASPECTS: Mr. H. D. Fitch; PREPARATION OF TABLETS: Mr. H. Burlinson; STANDARDISATION OF TABLETS: Mr. T. C. Denston.

Galley proofs of the science papers listed above and copies of the second and third papers that are being read by the opening speakers at the Symposium Session will be available a few days before the Conference. Members who are attending the Conference and who would like to receive copies of the papers are asked to communicate with the secretaries, 17 Bloomsbury Square, London, W.C.1, enumerating the papers in which they are specially interested, not later than August 27.

COMPANY NEWS

Previous year's figures in parentheses

DISTILLERS CO. (BIOCHEMICALS), LTD.—Mr. Derek J. Hayman, formerly commercial manager of the company, has been appointed sales director.

DRUG HOUSES OF AUSTRALIA EXPORT, LTD.—The new names of subsidiary companies given in the *C. & D.*, July 24, p. 78, should in each case read "D.H.A." and not Drug Houses of Australia, as stated.

T. & H. SMITH, LTD.—Group trading profit for year ended March 31 is £253,755 (£72,290), plus investment income £7,595 (£1,036). Net profit £86,201 (£29,375 after transfer of £30,000 from raw materials reserve).

VITAMINS, LTD.—A dividend of 2.4d. per share, less tax, on 4,149,333 ordinary shares (2.4d. per share on 3,112,000 shares) is recommended. The profits for the group, subject to completion of audit, after charging all expenses other than United Kingdom taxation of £45,827 (£36,603) amounted to £87,123 (£63,451).

BIDDLE, SAWYER & CO., LTD.—The trading results of the company for 1953 show a considerable reduction in profits compared with the previous year. Mr. D. L. T. Oppé (chairman) states that that was partly due to a reduction in profit margins in the export field and partly to a fall in the market value of products carried in stock. Gross profit is £81,059 (£200,045).

SOUTHALLS (BIRMINGHAM), LTD.—It is proposed to make a free capital issue in the proportion of two new ordinary shares of 5s. each fully paid for each 5s. unit of ordinary stock held. The directors point out that the amounts to be distributed in dividends for this year are not likely to be increased, particularly in view of the fact that trading conditions continue to be difficult. An interim dividend on account of 1954 of 7½ per cent. on the present capital has been declared.

New Companies

P.C.—Private Company; R.O.—Registered Office

FREYNES & CO., LTD. (P.C.)—Registered in Dublin. Capital £7,500. To acquire the retail and wholesale businesses of pharmaceutical and veterinary chemists carried on by John G. Freyne at Orchard Road, Clondalkin, co. Dublin. John G. Freyne, Ph.C.I., is managing director and chairman.

RODERICK SMITH, LTD. (P.C.)—Registered in Edinburgh. Capital £3,000. To carry on the business of manufacturers of medicines, drugs and proprietary articles of all kinds, etc. Directors: Roderick R. Smith, M.P.S., C. A. Matheson and John Macdonald. R.O.: 50 Point Street, Stornoway.

SIMPSON'S (CHEMISTS SUNDRIES), LTD. (P.C.)—Registered in Edinburgh. Capital £16,000. To deal in chemists' sundries, etc. Directors: D. A. Simpson, 75 Brighton Place, Aberdeen; and J. M. Dickie, 11 Kingshill Avenue, Aberdeen.

LEGAL REPORTS

Indian Hemp Charge

At Thames magistrates' court, London, recently, Abdul Hakim, seaman, and Iris Evans, housewife, were committed for trial at London sessions on charges of being in possession of Indian hemp (five packets) and morphine hydrochloride (two tubes). Both were released on bail.

Theft from Employers

ARRESTED after losses of stock had resulted in a special watch being kept at the Bruton Place, Mayfair, premises of his employers, Wm. Martindale, Ltd., wholesale chemists, Michael Casey, checker, Cadogan Place, Chelsea, was sent to prison for six months by the Marlborough Street, London, magistrate for stealing two cartons of Veganin tablets valued at £67. Concealed watchers saw him take the cartons from a store rack to a cellar. Next morning he was seen to help load them into a car, which was driven off by an unknown man, believed to be a confederate, before the number of the car could be taken.

Pharmacy Act Fines

At Lancaster court, recently, Leslie Atkinson, 4 Ulster Road, Lancaster, was fined a total of £4 for selling poison at a shop not entered in the local authority's list and for selling it in a container not labelled in the prescribed manner. Mr. R. Spencer (district inspector of weights and measures) said that two renewal forms for authority to sell poison were sent to Atkinson but not completed. On June 16 a weights and measures inspector bought poison from him at his shop. —At the same court, Richard Forshaw, 1 Lonsdale Place, Lancaster, was fined £1 for selling on June 16 poison in a container not labelled in the prescribed manner. Forshaw said he had never sold the product before and when the inspector asked for it he did not even know the price of it. The chairman said there were "mitigating circumstances."

BUSINESS CHANGES

MR. F. H. CONNELLY, M.P.S., has taken over the pharmacy of Evans & Brown, 119 Brighton Road, Coulsdon, Surrey.

MR. THOMAS GOULD, F.P.S., has removed to 113 Lanehouse Road, Thornaby-on-Tees, North Riding of Yorkshire.

R. W. GREEFF & CO., LTD., 12 Finsbury Circus, London, E.C.2, announce that they are now on the International Teleprinter system, for which their address is London 2590. Answer-back code: Greeff, London.

Appointments

MOORE MEDICINAL PRODUCTS, LTD., 64 Gloucester Place, London, W.1, have appointed Mr. R. Tucker their general sales manager.

BENGUE & CO., LTD., Mount Pleasant, Alperton, Wembley, have appointed Mr. A. H. Pentin to their production department and Messrs. J. G. Dunlop, C. M. Walker and A. B. Rands to their representative staff.

PERSONALITIES

MR. G. E. TREASE, F.P.S. (head of the department of pharmacy, Nottingham University) is being awarded the degree of *Docteur de l'Université* at a ceremony at Strasbourg on November 22. Mr. Trease, born in Nottingham and educated at Nottingham High School, has been on the staff of the University since 1925, except for two years during the 1939-45 war when he was employed at the Ministry of Economic Warfare. In 1951 he went on a lecture tour in France under the auspices of the Franco-British Pharmaceutical Commission. Mr. Trease is widely recognised as an authority in pharmacognosy.

MR. C. E. T. CRIDLAND, A.M.I.E.E., who was recently elected



president of the Scientific Instrument Manufacturers' Association for the year 1954-55 was educated at Trent College, Nottingham, and afterwards at Faraday House Engineering College, London. After service with the Royal Air Force in the 1914-18 war and a period of working in Leeds and London, he started one of the first wireless manufacturing companies in Britain. He moved to Birmingham in 1923, and in 1946 acquired the whole of the share capital of Aldis Bros., Ltd., in which company he applied mass production techniques where previously only batch quantities had been dealt with. In 1953 he acquired the patent rights of a new type of industrial baling machine, and formed the company of Portable Balers, Ltd., of which he is chairman and managing director. He has served on the council of the Scientific Instrument Manufacturers' Association since 1949.

MR. F. W. PARTINGTON (principal, Bristol College of Technology), who is retiring at the end of the present session, joined the staff of the College in 1931 as head of the engineering department, after serving as a lecturer at Bradford for eleven years. He became vice-principal, and in 1949 was appointed principal. While in Bristol he played a leading rôle in the development of technical education, and in recognition of those services was awarded the honorary degree of M.Sc. of Bristol University in 1951. He has been president of the student association of the college since 1949. **MR. G. H. MOORE, M.Sc., F.P.S., F.R.I.C.**, who succeeds Mr. Partington, qualified as a chemist and druggist in 1925 and passed the Pharmaceutical Chemist examination in 1928. In 1929 he was appointed lecturer in pharmaceutical chemistry in the school of pharmacy in the college. He became an associate of the [Royal] Institute of Chemistry in 1933 and a fellow in 1943. He was appointed head of the science department of the college in

1938 and became an examiner in chemistry for the Pharmaceutical Society in 1949. Soon after Mr. Partington's appointment as principal of the technical college in 1949, Mr. Moore became vice-principal. In 1953 he received the honorary degree of M.Sc. of the University of Bristol in recognition of his services towards the expansion of technical education in the south-west of England. He was actively associated with the foundation of the student association of the college and acted as treasurer for many years.

MR. THOMAS SHOOTER, M.P.S., a partner in the pharmaceutical business of Calverley & Shooter, Leeds, who is retiring after sixty-one years in the business, was recently presented with an engraved tankard and a silver table lighter by members of the Leeds Pharmaceutical Committee. Mr. Shooter has served on the Committee since 1920.

MR. S. STEWART DUNN, M.P.S., deputy mayor of Deal, has been successful in a local campaign worthy of his position as the only Independent member of the council. Plans had been made for a new £218,000 pier that would include a concrete apron which he argued would be a potential danger to the town, for high

seas sweeping over the apron would swamp the shopping centre, which lies below high-water mark. The council has now approved alternative plans. Mr. Dunn is at the head of one of the town's leading "light industries." At his pharmaceutical business at 98 High Street a staff of sixty is employed to deal with developing and printing work received from all parts of the country.

MR. W. J. HURRAN, B.Sc., F.R.I.C., who was recently appointed an executive director of Glaxo Laboratories, Ltd. (C. & D., June 12, p. 595) will direct the activities of the company's subsidiary companies unit and certain matters concerning proposed new products. Mr. Hurran joined the staff of the company in

1936 as an assistant chemist, and was for several years engaged on various research projects. He was associated with the work that ultimately led to the isolation of vitamin B₁₂. In 1946 he was transferred to the staff of the company's New Zealand subsidiary, of which he became managing director a year later. He returned to England in May.

MARRIAGE

BOOTH — NAUGHTON. — At St. Patrick's Roman Catholic Church, Westgate, Bradford, Yorks, on July 22, Thomas Geoffrey Booth, M.P.S., 20 Pollard Lane, Undercliffe, Bradford, to Mary Naughton, Hollings Road, Bradford. Mr. Booth is a lecturer in pharmacy at Bradford technical college and a member of the committee of the Bradford Branch of the Pharmaceutical Society.

DEATHS

CROSS.—On July 24, Mr. Edward Robert Cross, 12 Filey Road, Scarborough, Yorkshire, aged eighty-eight. Mr. Cross passed the Pharmaceutical Chemist examination in 1888. He was local secretary of the British Pharmaceutical Conference meeting in Scarborough in 1921. Mr. Cross was the son of a former mayor of Scarborough (alderman H. M. Cross). After qualifying, in 1892 he opened his own business in Rochdale. Three years later he returned to Scarborough to take over a chemist's shop. In 1914 Mr. Cross retired, and his business was taken over by a former assistant, Mr. F. A. Lund. Botany was Mr. Cross's hobby, and he put his knowledge to practical use during the 1914-18 war when he and his wife collected, and sterilised, enough sphagnum moss to make 20,000 field dressings. He took a very active part in the affairs of the Scarborough Field Naturalists Society, and the presidency of that body was one of many which he had held. For some time after the 1914-18 war he was president of the Scarborough Philosophical and Archaeological Society. He was for many years connected with the hospital, and was from 1939-43 its president. He also held the post of treasurer. He used to recall a former Scarborough man whose official description was given as "company director," and thought that he might qualify for the same title. He was at various times a director of the Spa, of which at one time he was chairman, and of six other local companies in such varied fields as gas, mineral waters, hotelkeeping, and the cliff lift. He was president of the Scarborough Building Society, Ltd.

JONES. — Recently, Dr. Loyd A. Jones. Dr. Jones was formerly head of the physics division of the Eastman Kodak Co. research laboratories and was a widely known authority on the physics of photography. He retired on May 1 after completing more than forty years' service with the company

and died only a few weeks later. Dr. Loyd Jones took his B.Sc. degree in electrical engineering in 1908 and an M.A. degree in physics in 1910. An honorary D.Sc. was conferred upon

him by the University of Rochester in 1933. He joined Messrs. Kodak as assistant physicist in the Eastman Kodak research laboratories in 1912 and became chief physicist in 1916. He was the recipient of many honours for his outstanding contributions to photographic theory and practice especially in photographic sensitometry and the psychophysics of vision, in which fields he was an acknowledged authority. The Royal Photographic Society recognised his researches with its three highest awards: the progress medal in 1948, the Hurter and Driffield medal in 1949 and honorary Fellowship of the Society in 1949. His work was rewarded by the Photographic Society of America with its honorary Fellowship in 1949, the progress medal in 1950 and the P.S.A. Journal award in 1952.

RUSHTON.—On July 24, Mr. Donald Jack Rushton, F.P.S., 25 Broad Oaks Road, Solihull, Birmingham.

Mr. Rushton qualified as a chemist and druggist in 1921 and passed the Pharmaceutical Chemist examination in 1922. He was commissioned in the Royal Engineers in the 1914-18 war. Mr. Rushton took over the pharmacies previously owned by his father. His many and varied activities in the sphere of pharmacy in Birmingham are typified by the following appointments which he held. For twenty-seven years he was secretary of the Birmingham Pharmaceutical Association, the Birmingham Branch of the Pharmaceutical Society, and the Birmingham Branch of the National Pharmaceutical Union, becoming president of the Association and chairman of the latter two organisations in May 1953. He was secretary of the Birmingham Pharmaceutical Committee from 1942. He was pharmacist member of the Birmingham Executive Council and, from its inception, took an active part in the Council and its various subcommittees. For a number of years he had been a member of the Birmingham College of Technology pharmacy advisory committee, being its chairman at the time of his decease.

Mr. C. McArdle, F.P.S. (secretary of the Birmingham Pharmaceutical Association) writes: With us the name of Jack Rushton is synonymous with all that is best in British pharmacy. Behind a quiet, unassuming personality lay a seemingly infinite capacity for work, the fruits of which, in the Birmingham area alone, will long remain as a monument to a truly great pharmacist. His loss can be simply summed up in the one word—tragic.

SKINNER.—At Roseneath Villa, Oban, on July 21, Mr. Donald McDougall Skinner, M.P.S., aged eighty-nine. Mr. Skinner who was in business at 14 George Street, Oban, was a former provost of the town.

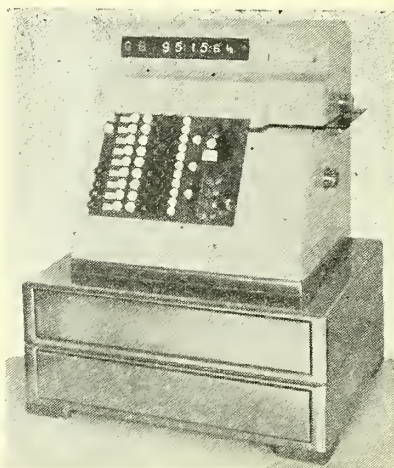


EQUIPMENT AND ACCESSORIES

Anti-pilfer Cash Till.—The Petco recording till manufactured by W. S. Products, Ltd., 214 Norwood Road, London, S.E.27, has been designed to meet a demand for a moderately priced cash till that is anti-pilfer to a high degree, and also enables the trader to check all features of the handling of cash by assistants. When a sale is completed the amount of the transaction is written in the aperture provided and the release bar above the drawer is pressed downwards. With that action a warning bell is sounded, the drawer opens, a receipt is issued for the customer, and the recording drum moves one place so that the amount of the transaction is covered and cannot be altered. At the same time, the transaction counter (which is within the locked body of the machine) records the further transaction. When the cash is put in the till and change given, the drawer is closed ready for another cycle of operations. Since the receipt is a duplicate carbon copy of what is written on the recording drum, it must tally with the money put in the till, otherwise the discrepancy will show at the end of the day. Furthermore the customer, by checking the receipt, also helps to provide an additional safeguard against mistakes or worse. The Petco till is of all-metal construction, tastefully finished in an attractive grey "hammered" effect.

Heated Slab and Shelf.—For pharmacists, Heat Control, Ltd., Heaton Works, Potter Street, nr. Harlow, Essex, have produced a heated ointment slab and a heated shelf. Each incorporates a non-metallic heating element with a test record of 30,000 hours' continuous burning to date. The heated ointment slab is a smooth panel 12 x 12 x $\frac{3}{8}$ in. mounted on four rubber buffers and surmounted by a glass of $\frac{1}{4}$ in. plate. When warm (in about twenty minutes) the temperature of the slab is such that an ointment becomes easily workable in a few moments, even in the coldest weather. For cleaning purposes, the glass plate is removable. Consumption is about one unit in twenty hours. The heated shelf is intended to overcome the difficulty experienced in cold weather with such substances as acetic acid and olive oil, which tend to solidify or crystallise, as well as several proprietary emulsions that tend to separate in cold weather and are then difficult to redisperse. The shelf is only slightly warm. It will thaw out already solidified liquids, but is primarily intended for storing the "difficult" substances in cold weather to prevent solidification. Any hazard of bottle breakage through warming is eliminated by the even heating of the whole surface area of the shelf, the surface of which, moreover, is proofed against acids, alkalis and oils. Consumption of electricity is only 25-30 watts per hour. The standard size is 24 x 8 x $\frac{3}{8}$ in. thick, mounted on rubber buffers, making an overall thickness of about $\frac{1}{2}$ in. The buffers may be removed for bracket mounting if desired. A two-wire connection from a plug or bayonet fitting is adequate.

Recording Cash Registers.—The new Regna cash register made by JOELI SAFE CO. (LONDON), LTD., 7 York Place, Adelphi, London, W.C.2, provides the machinery for operating a modern, effective cash system with single and double receipts. The customer receives a clearly stamped cash receipt of handy size. A copy is retained for accounting. With the firm's name as a heading, the receipts are an inexpensive form of reminder advertising. Every sale is visibly recorded. If necessary it can be analysed according to operator, department, or commodity, providing a record of each day's sales with the total subdivided into categories as desired. To check the cash taken at any hour of the day, a button is depressed and a handle operated to give an instantaneous subtotal for verification against the cash in the drawer. By similar action the total cash sales are ascertained at the end of the day. The Regna is electrically or manually operated. — The Sweda cash register marketed by LONDON OFFICE MACHINES, LTD., Terminal House,



Sweda accounting cash register.

Grosvenor Gardens, London, S.W.1, is also a cash register and accounting system in one. At the end of the day, sales can be dissected and totalled in the categories required. An itemised and totalled ticket is issued from the register on each sale, and a separate audit roll locked in the machine records the same particulars. Assistants' code numbers can be recorded, and separate cash drawers can be provided for them. Machines can be provided with a platform so that hand-written sales slips are overprinted with totals. All models are specially constructed to meet individual requirements. They are electrically operated and measure only 14 in. sq. Each carries a five-year guarantee.

Punched-card Medical Records.—A description of the methods by which the New Zealand Health Service groups medical statistics by means of the Hollerith punched-card system of the British Tabulating Machine Co., Ltd., 17 Park Lane, London, W.1, is given in No. 82 of the company's journal, *The Tabulator*.

TRADE NOTES

Indian Botanical Drugs.—Indian Drugs and Colonial Co., G.P.O. Box 1856, Madras, 1, India, has been set up mainly to handle exports of Indian botanical drugs.

Granted a British Patent.—The Frickol improved colostomy belt has been granted a British patent number. The makers are F. E. Fricker, Ltd., 34 Manchester Road, Bradford.

Bonus Offer.—The offer of bonus terms by B. Hooper & Co., Ltd., 6 Railway Place, Fenchurch Street, London, E.C.3 (C. & D., July 10, p. 33), applies to Ilox eye lotion.

Trade Packers.—George Mayor (Pharmaceuticals), Ltd., 325 Kennington Road, London, S.E.11, specialise in the manufacture and/or packing of pharmaceutical or household preparations under analytical control.

Chromium - wire "Dispenser."—With orders for 6 doz. small tins of Ayrton's antiseptic healing cream, the makers, Ayrton, Saunders & Co., Ltd., Hanover Street, Liverpool, are now supplying a chromium wire "dispenser."

Handbag Size Reintroduced.—The Crookes Laboratories, Ltd., Park Royal, London, N.W.10, have reintroduced at a slightly increased price, the 1-oz. (handbag) bottle of Crookes Lactocalamine lotion. The packing is available to chemists on bonus terms.

Shares out of Earnings.—Chemists who are interested in taking out shares in industrial concerns can get advice on how to proceed from a booklet, "How to Buy Shares out of Earnings," obtainable free from Whitehead Industrial Trust, Ltd., 177 Regent Street, London, W.1.

Shaver Case "Crown."—Remington Rand, Ltd., 1 New Oxford Street, London, W.C.1, have produced a display "crown" for their Remington electric shaver case which has the advantage that it does not take up a lot of space in windows. The crown is available on request by any of the company's stockists.

Link with Milk Advertisements.—Bengers, Ltd., Holmes Chapel, Ches., have produced a "crown" for Benger's food to tie up with the Milk Marketing Board's Press campaign. The crown reads: "You'll feel a lot better if you drink more milk—it goes down best with Benger's, the self-digested food."

Toilet Products for Athletes.—Under an arrangement reached with the council for England for the British Empire and Commonwealth Games, each member of the English team at the forthcoming Vancouver athletic meeting has received a supply of toilet soaps, talcum powder and other necessary toilet requisites presented by H. Bronnley & Co., Ltd., Warple Way, London, W.3.

Holiday Closing

ALL departments of Smith & Hill (Chemists), Ltd., manufacturing and wholesale chemists, Matilda Street, Sheffield, 1, are closing on Monday and Tuesday, August 2 and 3.

NEW PRODUCTS AND PACKS

Bath Luxuries Trio.—Innoxia (England), Ltd., 1 Eden Street, London, N.W.1, have introduced a trio of bath-time luxuries in a new perfume—Paris Mist. The trio comprises skin perfume, talcum powder and beauty soap packaged in a colour scheme of

the original vaccine; for cattle, 5 c.c., against 10 c.c. The company's *C. Pyogenes toxoid* is now being produced in 50-c.c. and 100-c.c. bottles. There are warehouse stocks of the 50-c.c. size. 100-c.c. bottles are becoming available shortly.

Emollient Hand Cream.—Evans Medical Supplies, Ltd., Speke, Liverpool, 19, have introduced a hand cream, Emolan, formulated with lanolin and bland vegetable oils. Emolan is issued in printed and cartoned tubes in display outers of 1 doz.

Rubefacient Cream.—Every general medical practitioner in the United Kingdom is being circularised this week by S. West, Ltd., 2 Exchange Buildings, Rutland Street, Leicester, with details and an offer of clinical samples of the company's new product Cremalgin balm (rubefacient cream).

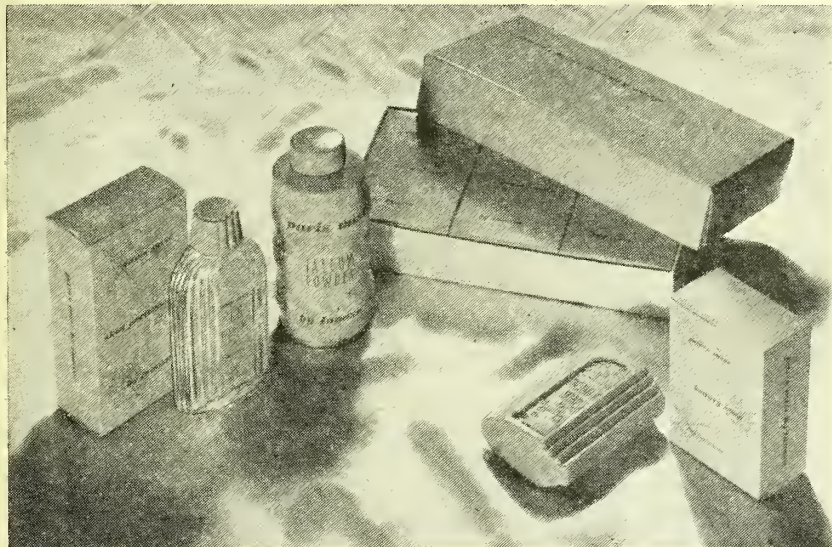
Multiple-vitamin Capsules.—In recent years public interest in vitamins has led to the development of many new vitamin products, of which the latest, Plenamins, incorporates no less than eleven vitamins. Plenamins capsules, manufactured and marketed by the Rexall Drug Co., Ltd., Loughborough, Leics, have been established in the United States for many years. Included in the formula are substantial proportions of vitamin B₁₂, folic acid, liver concentrate, and iron. Now being introduced to chemists by Rexall representatives, Plenamins will shortly be available to all pharmacists in unlimited quantities. National Press advertising, and the distribution of display material, are scheduled to commence shortly.

PHOTOGRAPHIC NOTES

A Range of Cameras.—Full descriptive details of box, folding and precision cameras in the Agfa range are obtainable from the makers, Agfa, Ltd., Wimbledon Factory Estate, London, S.W.19.

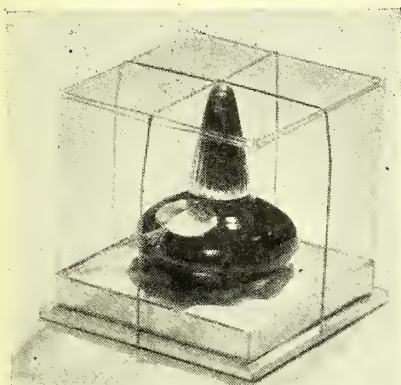
Radiograph Illuminator.—The model 70 illuminator of Kodak, Ltd., Kingsway, London, W.C.2, enables 70-mm. radiographs to be viewed in strip, either unmounted or mounted in normal card mount. The illuminator consists of a dome-shaped metal reflector with opal viewing screen in black plastic disc 5½ in. in diameter.

"Junior" Cameras.—To customers wanting a simple modern folding camera the new Junior cameras of Kodak, Ltd., Wealdstone, Harrow, should appeal. The two models, I and II are alike except for lens and shutter equipment. They take eight 2½ x 3¼-in. pictures on Kodak film 620. The Junior I has a fixed-focus, fixed-aperture lens, giving sharp pictures from 8 ft. to infinity, single-speed Kodette III shutter (instantaneous and brief-time settings) operated by a plunger-type shutter-release and cable release socket. The Junior II has an Anaston f/6.3 lens, choice of shutter speeds, and flash contacts. The lens can be focused down to 3½ ft. and the Dakon II shutter gives speeds of 1/25 and 1/50 sec., with time and brief-time settings. There is a built-in depth-of-focus scale. The red plastic shutter release button is located on the side of the camera, and the new Kodak flashholder, model II, is available as an accessory.



"misty" blue with silver stars. Distribution to the company's stockists started on July 1. Gift coffrets are being released later.

Perfume in a Ruby Bottle.—In White Fire, a new perfume by J.



Grossmith & Son, Ltd., 45 Piccadilly, London, W.1, the art of the designer has matched that of the perfumer, producing ruby red bottles never before used for perfumery. The red and white boxes catch the eye, and the contents, with their citrous topnote and dry undertone, are fully in line with contemporary tastes. The series includes perfume, bouquet, toilet soap, bath cubes and bath dusting powder.

A New Veterinary Vaccine.—Genatosan, Ltd., Loughborough, state that braxy and blackleg vaccine, A.P.A., which has superseded braxy and blackleg vaccine, is now available for sale. It should be noted that the dose for sheep is 2 c.c., against 5 c.c. for

Nylon Compacts.—Nylo-Puff, Ltd., 91a High Street, Camberley, Surrey, are offering a silk-backed washable nylon compact puff (fluffy or velvet) in 2-in. and 2½-in. sizes, individually packed, in blue, pink and white pastel shades.

New Beauty Series.—Richard Hudnut, Ltd., Power Road, London, W.4, are introducing a new Richard Hudnut series of beauty preparations. The existing Three Flowers series, at a different price level, will continue. The new series comprises lanolin-based skin freshener, mildly astringent cleaning cream, Creme Superbe skinfood containing tocopherol, Basic Dew foundation lotion, Sophisti-creme cream foundation, flatter-Glo fluid foundation, "flatter-face" powder-cream compact, bloom (cream rouge), lipstick and face powder.

Pocket Sponge.—Kay Bros., Ltd., Stockport, have produced their Mermaid Foamaprene sponge in a pocket



size in plastic envelope, as illustrated. The sponge is intended for use with suntan oil, cosmetics, or for washing children in travel.

MEDICAL USES FOR RADIOISOTOPES

Papers read at second international conference

AT the second conference on radioisotopes held at Oxford, July 19-23, DR. R. C. TUDWAY, Bristol, described the use of iridium-192 in place of radium in uterine cervical cancer. That compound emits less penetrating γ -rays, and enables sensitive tissues to be shielded to a greater extent by silver, lead, and uranium plates. The half-life of iridium-192 is seventy-four days. Promising results were also reported by DR. F. ELLIS and MR. R. OLIVER, Oxford, in the treatment of papillomatosis of the bladder with gold-198 as a colloidal suspension, that being retained in position for three hours. The syringe illustrated was used to inject the solution into a catheter—it is of 100-mil capacity, and encased in a 5-mm.-thick lead case to protect the user. Radioactive tantalum wire (0.2-mm. diameter) proved versatile in that it could be introduced in a hypodermic needle through the cornea in cases of melanoma of the iris; into the tongue for cancer of the month; and adjacent to the rectum for a distance of 9-10 cm. where cancer of that organ was present. Wire was less likely to obstruct blood vessels than implanted radium needles, and could be used in greater lengths, while being more comfortable for the patient, as it conformed closely to the anatomy.

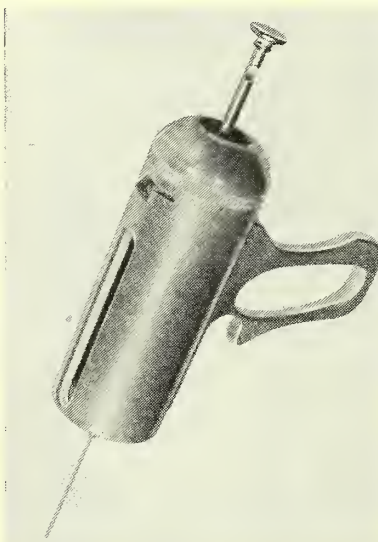
Colloidal Radiogold

Considerable interest was shown in the paper of DR. E. E. POCHIN, London, concerning the technique of treating bronchial and pulmonary carcinoma with colloidal radiogold adsorbed on sugar-charcoal particles of 30-43 μ (0.03-0.04 mm.) diameter those being too large to pass through the lung capillaries. Thus, on intravenous injection, they were filtered from the circulation and retained in the lungs. Dextran was used as the suspending agent, but chemical changes led to sedimentation. In animal experiments a mean of 96 per cent. was located in the lungs after injection into the general circulation; a single lung could be treated by injection into the appropriate pulmonary artery. DR. F. ELLIS, Oxford, inquired about the incidence of side-effects, and DR. POCHIN said that doses of 30-50 millicuries of ^{198}Au could depress the lymphocyte count by 50 per cent. for up to a fortnight; no radiation sickness or fibrosis was noted.

The radiation of bismuth-206 resembled that of radium more closely than did that of radiogold, and DR. VAN DER WERFF of Nijmegen, Holland, considered it of more value in some cases. It was produced by bombardment of lead, followed by chemical separation and conversion into the citrate with a pH of 6.8-7.0. The citrate was rapidly excreted after subcutaneous injection, and to give a prolonged effect the solution was therefore adsorbed in particles of a 5 per cent. suspension of absorbent charcoal in isotonic saline. Such suspensions were rapidly abstracted by the reticulo-endothelial system, and DR. C. L.

LEWIS, Oxford, expressed interest in the potential therapeutic uses in that connection. THE AUTHOR stated that it had been used locally in Hodgkin's disease.

DRS. ELSPETH LEDLIE and C. F. BAXTER gave an account of the clinical uses of ^{59}Fe . The human body contained, they pointed out, about 4 gm. iron, 65 per cent. in the circulating red corpuscles, and 20 per cent. stored in the liver, spleen and bone marrow as ferritin and haemosiderin. The remainder occurred in such enzymes as catalase and as myoglobin. Iron was absorbed from the gut, appearing as



"Gun" that takes a normal 100-mil glass-metal record syringe and provides 5 mm. of lead protection. It is used for up to 300 millicuries of ^{198}Au .

ferritin in the mucosal cells; for transport it was combined with globulin. If neutralised radioactive ferric chloride solution were mixed with a special metal-binding protein, and injected intravenously, the body utilised it in preference to the natural compound bound to globulin, and the amount present in various organs could be found by external counting with a Geiger-Müller instrument. The method was used in the diagnosis of polycythæmia, Hodgkin's disease, hypoplasia of the bone-marrow, lymphatic leucæmia and lymphosarcoma. MR. G. R. FRYERS, Leeds, considered that the presence of hæmolysis should be clearly indicated by a rising iron content of the plasma, and that the technique could be of practical value in the diagnosis of that condition.

Determining Cardiac Output

A paper from Guy's Hospital Postgraduate Medical School on a new technique for the determination of cardiac output was read by MR. N. VEALL. Methods used to date involved either the passing of a cardiac catheter, as in the Fick method, or injection of a dye such as Evans blue. The former

involved a small but definite risk to the patient, while the dye method required arterial puncture, and could not be repeated for some time, if only because of undesirable skin pigmentation. In the new method, albumin containing iodine-131 was injected rapidly into the left antecubital vein, and the chart recorder of the apparatus that measured the amount of radiation emitted was switched on. The "counter" was positioned close to the patient's chest. The value of the cardiac output was computed mathematically, and it might also be possible to determine the volume of the heart by similar means.

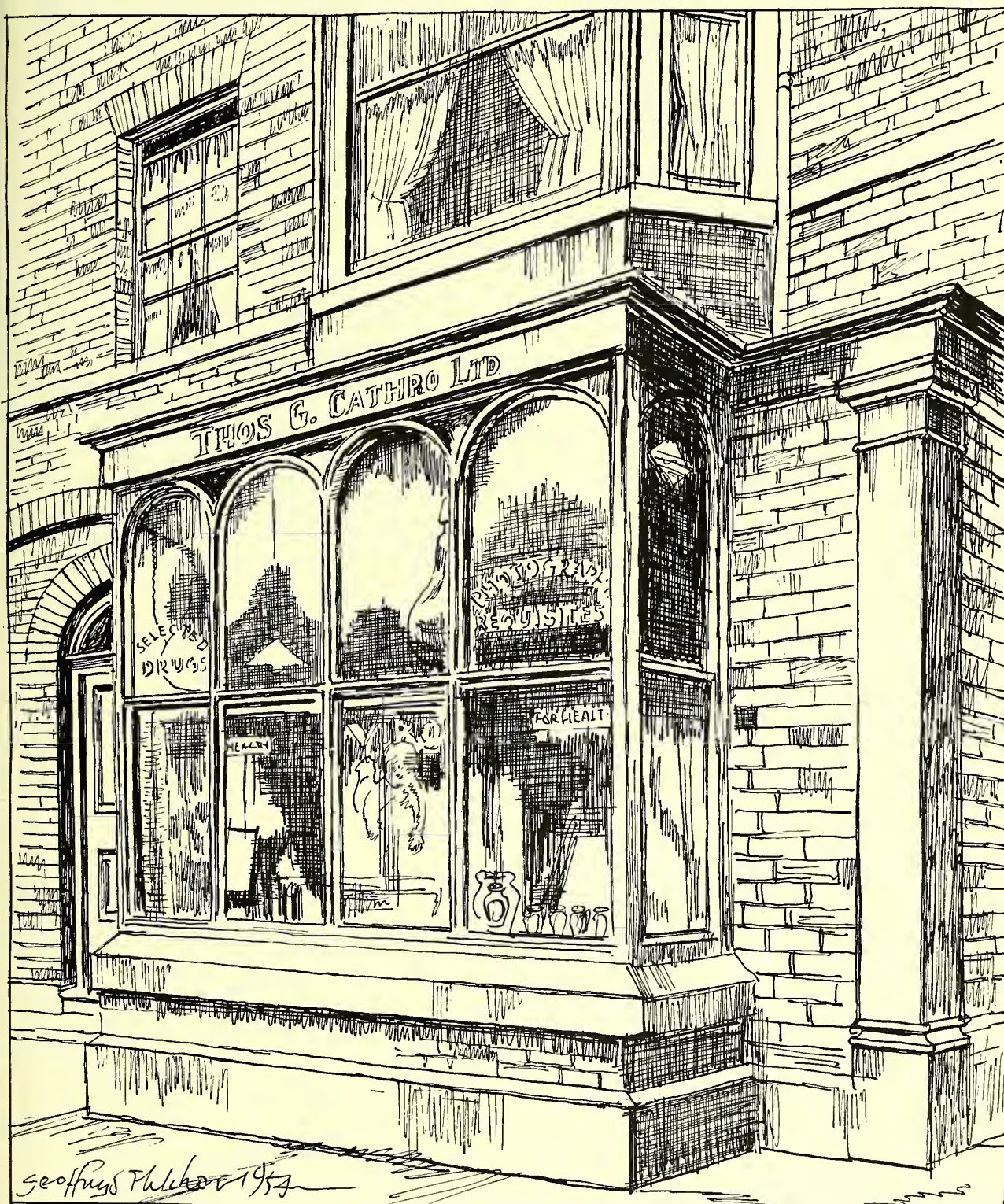
Reference was made by DR. S. ROWLANDS, London, to his previous work, in which it had been found that, when blood was withdrawn from dogs, the reduction in blood volume was greater than anticipated. The inference was that a fraction of the blood volume ceased to circulate. In the present experiments on cats, red blood cells were withdrawn, and half labelled with ^{32}P , the remainder with ^{51}Cr . One group of cells was injected prior to bleeding to determine the initial circulating blood volume by calculation based on the degree of dilution attained. The other group of labelled cells was injected, after hæmorrhagic shock had been induced, in order to obtain the subsequent circulating blood volume. Any subsequent dilution of cells labelled with the second isotope was due both to the advent of new cells and to the release of cells from static parts of the circulation. In every case the red-cell volume fell to a low level, but, where the blood pressure fell by less than 50 per cent., the final blood volume was greater than expected. Further experiments were being undertaken.

Synthetic Vitamin K

It had been shown that synthetic vitamin K in large dosage produced mitotic inhibition in certain tissue cultures, including human squamous cell carcinomas and, in conjunction with x-radiation, chromosome fragmentation occurred. A radioactive form of the tetra-sodium derivative containing bromine-82 was injected by MR. D. R. MAXWELL, Cambridge, into rats with Walker carcinoma 256, and the drug was seen to be concentrated in the tumour, and to a lesser degree in the testes, organs that were rich in dividing cells. As a tumour-localising agent, synthetic vitamin K held promise, but much more work was needed.

DR. L. F. LAMERTON, London, described experimental injection into animals of ^{59}Fe forty-eight hours after varying doses of irradiation of the whole body. The results showed that the uptake of iron by the blood decreased progressively as the irradiation dose increased. The results of previous workers who had found that that technique provided a sensitive index of the impairment of bone-marrow function produced by whole-body irradiation, was thus confirmed.

PHARMACIES OF BRITAIN—26



A LATE GEORGIAN-STYLE PHARMACY AT FRODSHAM, CHESHIRE

FRODSHAM has a most attractive High Street which contains, in addition to some mediæval buildings, a variety of delightful Georgian and early Victorian houses and shops. The premises of Thomas G. Cathro, Ltd., are in the continuance of the Georgian style that persisted into the early Victorian period, and the premises, which probably date from about 1830, seem hardly to have been altered since then.

THE WORLD'S GREATEST BOOKSHOP

FOYLES
* * FOR BOOKS * *

FAMED CENTRE FOR MEDICAL BOOKS

All new Books available on day of publication. Second-hand and rare Books on every subject. Stock of over three million volumes.

Foyles have Departments for Gramophone Records, Stationery, Handicraft Materials, Music, Magazine Subscriptions.

119-125 CHARING CROSS ROAD, LONDON, W.C.2

Gerrard 5660 (16 lines) ★ Open 9-6 (Thur. 9-7)

Two minutes from Tottenham Court Road Station

FERRIS & COMPANY, LTD.

BRISTOL

**MANUFACTURING AND
WHOLESALE CHEMISTS**

The House In the West for all Chemists' Supplies. Send us your orders for prompt and careful attention.

REGULAR ROAD DELIVERIES
In the West of England and S. Wales areas.

Telephone: BRISTOL 21381

Telegrams: FERRIS BRISTOL

GEORGE MAYOR (PHARMACEUTICALS) LTD

Specialists in the Manufacture and/or Packing of Customers' Own PHARMACEUTICAL or HOUSEHOLD PREPARATIONS. All lines made by us on your behalf are subject to Analytical Control.

All enquiries treated as Strictly Confidential

325 KENNINGTON ROAD, LONDON, S.E.11

Phone: RELiance 3756

**MAG. CARB.
POND. B.P.**Fine Powder · Standard Powder
Granular**DUNN BROS. SUCCRS. LTD.**

1, Booth Street, Manchester.

Established 80 years.

**Dispensing
CORKS?**Immediate delivery from
RANKIN BROTHERS & SONS
(RANKINS PARTNERS, LTD.)OWNERS OF THE FINEST
CORK FORESTS IN PORTUGAL**139 Bermondsey St., London, S.E.1**

Telephone: HOP 0074

RECOMMENDED FOR NERVES FOR OVER 70 YEARS

**Dr. NIBLETT'S
NERVE
SEDATIVE**Retail price 6s. per
bottle including purchase tax.

TRADE DISCOUNT 33½%

C. P. NIBLETT 10 LICHFIELD TERRACE, RICHMOND, SURREY
Telephone: RICHmond 3221**BURROUGH'S
ABSOLUTE ALCOHOL****JAMES BURROUGH LTD., 4 Cale Distillery, London, S.E.11**FOR IMMEDIATE AND FUTURE
DELIVERY**FOLIC ACID**

B.P./U.S.P.

For Home and Export

McKESSON & ROBBINS LTD.

"UNIVERSAL HOUSE"

Southwark Bridge · London · S.E.1

Telephone: WATerloo 3516/7/8

The "FRICKOL" Improved COLOSTOMY BELT
(British Patent No. 713603). "FRICOSE" (Reg.)
Two-way Stretch ELASTIC HOSIERY, Lastex Yarn.
ABDOMINAL BELTS, ELASTIC BAND TRUSSES, and
APPLIANCES. Supplied under N.H.S. QUICK SERVICE

Enquiries invited to:

F. E. FRICKER LTD., Imperial House, 34 Manchester Road, Bradford
(Surgical Appliance Manufacturers—Est. 1927)**INFORMATION WANTED**The Editor would appreciate information about
suppliers of the following items:DELERTE beam-type baby scale
BATIL shaving brush
CYCLAINE (hexylcaine hydrochloride)
ELUAHAC antiphones



The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at

28 Essex Street, Strand, London, W.C.2

TELEPHONE CENTRAL 6565

TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

The Authorities and Averaging

THE Ministry's continued refusal to operate full pricing of National Health Service prescriptions can but be received with dissatisfaction by contractors. Arrears, we are told, will be overtaken in August. Even if the considerable proportion of relatively inexperienced staff makes it impracticable to resume full pricing in September, a further six months' experience should enable the now numerous staff to tackle full pricing in doctor order. The receipt of scripts ready sorted by the chemist into doctor order is itself a great help in quick pricing. It also enables subsequent extraction of doctors' prescribing costs, and detailed examination of the orders of extravagant doctors, to be done with a minimum of extra work. The Ministry of Health is, apparently, now committed to furnishing all doctors with their individual prescribing costs, a move all will welcome. But the proposal to combine "average" pricing of prescriptions sorted on a price basis with investigation of prescribing, which necessitates resorting on a doctor basis, is a clumsy and laborious approach to the problem, particularly as the 1 per cent. sample will presumably also be retained. It may well prove that the work involved will exceed that of straightforward pricing in doctor order *ab initio*.

Surely the Ministry's decision indicates in those responsible for it an unpardonable lack of knowledge, on the one hand of the pricing machine and, on the other hand, of the strong antagonism on the part of contractors to averaging methods.

Greater Competition in Road Transport

CHANGES now taking place in transport are important because they will have the effect of creating new facilities for the carriage of goods.

For some years, the bulk of long-distance road haulage has been in the hands of the British Transport Commission. The Transport Act 1953 is changing that position. Under the Act a large section of the British Road Services is in process of being disposed of, mainly by the offer to tender of vehicles and sections of the business as "transport units." At first, the main units offered to tender were small, but in recent weeks larger units, often with premises, have been on offer. With their sale to a variety of purchasers, a spirit of competition will also undoubtedly come into operation.

Purchasers of transport units normally become entitled to special A licences, which permit them to operate without the restriction (in operation for some years)

to a radius of twenty-five miles from their operating base. At the end of the year, in fact, the twenty-five-mile restriction is being revoked in respect of all hauliers. Hitherto many firms have found it essential to operate their own vehicles, generally under C licence, in order to provide the desired service to customers. That has often necessitated considerable capital expenditure. They may now be able to effect savings in that respect.

Of course, even with the sale of thousands of vehicles, the British Transport Commission will remain the largest single operator of road transport in the country, and it is already apparent that the Commission intends to compete strongly for traffics. The Railway Executive is also changing its attitude to the transport of goods. The intention is that, instead of operating largely as a single unit controlled from headquarters, the system shall operate under six managers, each with a large measure of responsibility. In each area there is also to be an authority with fairly wide powers over capital expenditure, and with considerable freedom in quotation of rates. Under the Transport Act, 1953, many restrictions on rates were already discontinued, including the necessity to publish rates (except that new maximum schedules that are to come into being must be publicised). Other legal restrictions, such as the necessity to quote equal rates, and the avoidance of undue preference, have also been revoked. Freedom in such matters as agreed charges is to continue.

The changes mean that the railways will be in a better position to compete with road traffic, and that they will have greater flexibility of arrangement. Since the passing of the Railways Act, 1921, railway goods rates have been calculated from a number of factors, including the classification of merchandise, mileage, and weight. Those factors have given rise to standard schedules. That whole basis of charging is being altered, the only legal requirement with regard to rates being the maximum schedules referred to. The Transport Acts, 1947 and 1953, called for the British Transport Commission to prepare draft schemes of charges, and they will cover railway goods transport. The scheme will undoubtedly be presented before long. In order that no opportunity may be lost of delivering by the most economical method available, it is more than ever essential in the new conditions arising that owners of vehicles should keep accurate records of vehicle-operating costs.

ECHOES OF THE PAST

SOAP AND CREAM OF VIOLETS

From *The Morning Chronicle*, March 5, 1795

By HIS MAJESTY'S ROYAL LETTERS PATENT. THE Proprietor of the PATENT SOAP and CREAM of VIOLETS, respectfully acquaints the Nobility and Gentry, that the long estimation the above valuable articles have been held in, especially at this season of the year, has been the occasion of stirring up many spurious kinds, in order to injure him in his property, which he has engaged in for the support of himself and a large family; to prevent which as much as possible, he thinks it his duty to inform the public in general, that he continues to make the said Patent Violet Soap and Cream of Violets, in their true genuine state, and vend them at his usual Offices, No. 102, Bank Buildings; No. 6, Bloomsbury-square; and No. 96, in the Strand; at which Places may be had, for the convenience of Private Families, Boxes containing nine squares of the Soap for one Guinea, which is a saving of 3s. 9d. in this small quantity. To be had also of those Venders who have his engraved appointment signed and sealed by him.

Onward from Galen

A CURRENT CAUSERIE

ACCIDENTAL poisonings of children are a too frequent occurrence. The problem of preventing such accidents (often fatalities) is at present occupying the attention of the Pharmaceutical Society's Council (*C. & D.*, June 12, p. 600). It is satisfactory to record that the Royal Society for the Prevention of Accidents has produced a warning placard:

WARNING

KEEP MEDICINES OF EVERY KIND OUT OF REACH OF CHILDREN

Many common medicines, although harmless when properly used, are dangerous if taken by inquisitive small children. Tablets, pills and liniments are the most likely to be swallowed.

Put your medicine away after use

Its dimensions being 7 in. x 9½ in. we think that its message might have been reinforced by the omission of the explanatory section "Many common medicines. . . ." But that is a minor criticism. Indeed, all praise to those responsible for a useful weapon in the education of the public to an insidious danger. For when all is said and done such education is the common-sense answer to the problem. The cards, which are intended for display in chemists' shops, doctors' waiting rooms, etc., are obtainable from the Royal Society for the Prevention of Accidents, 52 Grosvenor Gardens, London, S.W.1, price 1s. 1d. each for less than twelve. For more than twelve copies reduced rates are quoted.

★

I HAVE just been re-reading an address given earlier in the year by the chief investigating officer of the British Oxygen Co., Ltd. Speaking on safety aspects (that is, the absence of accidents) of the use of cylinders of compressed gases, he said "It is really amazing that the number of accidents are relatively small." The company's output of cylinders is in the region of twelve million of acetylene and thirty-six million cylinders of oxygen each year. For identification purposes the cylinders are marked in different colours. "Inflammable gases are red, toxic gases are yellow, toxic and inflammable, yellow and red. To prevent the interchange of fittings between cylinders of combustible and non-combustible gases, the valve outlets are screwed left-hand and right-hand respectively." The speaker's preoccupation with industrial uses of compressed gases is understandable, and the comparative freedom from accidents in industry that has attended the use of colour and other devices to prevent confusing one gas with another is most gratifying. It remains a pity that the poor relation of the industrial gas cylinder — the medical gas cylinder — still figures among the causes of accidents in hospitals by confusion between cylinders that are certainly distinguishable from one another but not to a sufficiently striking extent.

★

A GOOD deal of publicity and some criticism, much of it adverse, has been given recently to the introduction of instruction in beauty culture and the use of cosmetics into the curriculum of some girls' schools. Lectures and demonstrations have, it appears, been given to some of the older girls by representatives of well-known cosmetic manufacturers, and senior girls from one school were recently given free beauty treatments at the London salon of one of the manufacturers. Now the boys have apparently gone one better and launched into cosmetic manufacture, for it is reported that, at an exhibition of physics and chemistry organised as part of the recent quatercentenary celebrations at Queen Mary's School, Walsall, Staffs, a boy pupil exhibited a lipstick entitled "Evening in Walsall."

His ingredients are understood to have included red ink. A lad of such precocious ingenuity should go far: it is difficult to judge at this stage whether he shows greater flair for the publicity side or the technological. Somebody should be drafted to ensure, however, that his product, as at present formulated, does not find its way into the girls' schools, or the criticisms already referred to might have greater justification.

★

LESS than a quarter of a century ago most pharmacists could be reasonably sure that a fair proportion of their time after qualification would be spent in exercising their craft of compounding and dispensing. Those who would use their qualification as a stepping-off ground for acquiring higher academic honours were a comparatively small minority. In fact, students were occasionally heard to grumble that the theoretical knowledge they were required to digest would be of little use to them once they had left their student days. Today the situation has radically changed. The newly qualified has an almost encyclopædic theoretical knowledge of certain subjects and looks for a post in which it will be in demand. The graduate of a few years ago, on the other hand, needs refresher courses to keep himself up to date. The swing-over from craftsman to consultant is nowhere better shown than in the dwindling importance attached to the period of practical training as well as in the high proportion of students reading at universities for a degree in pharmacy (see *C. & D.*, July 17, p. 59) compared with the number of those registered as students of the Society. The surviving exponents of the dying craft of dispensing *secundum artem* may yet wonder, with some justice, whether pharmacy is so aesthetically satisfying as it used to be. Can there be as much satisfaction in recording the beating of a frog's heart on a smoked drum as in producing a well-rounded, expertly silvered batch of pil. rhei. ?

★

MENTION and illustration in this column recently of the bookplate of a Dutch pharmacist has prompted English pharmacists to write in and point out that bookplates are still used in this country. The plates here reproduced are those of Mr. H. E. Brocksom, M.P.S., printed brown on



cream, and a black-and-white bookplate that is shared by Mr. Arthur Mortimer, M.P.S., and Mrs. Mortimer. Mr. Brocksom has also sent for our delight a collection of bookplates of Spanish, German, Mexican and other physicians and surgeons. One, depicting a tooth and what look like rather vicious dental instruments of pre-anæsthetic days, seems calculated to ensure a quick return to the owner of any book borrowed.

CORRESPONDENCE

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

METHYLPENTYNOL IN VERSE

SIR,—May we ask you to pass on our hearty congratulations to the author of the excellent stanzas poem dealing with methylpentynol (*C. & D.*, July 24, p. 89). Methylpentynol has received extraordinary attention from the lay Press, but this verse is tribute indeed to a most amazing drug. The metre in which it is written is, we believe, associated with the style of Sir Walter Scott. The writer is a worthy pupil of that inimitable master.

C. NORMAN, *Sales Manager (Pharmaceuticals)*,
LONDON, W.8
BRITISH SCHERING, LTD.

WELFARE FOODS

SIR.—So the National Pharmaceutical Union was "seriously considering" sanctions against any of its members who distribute welfare foods free of remuneration (*C. & D.*, July 3, p. 4). If free distribution were refused the Ministry would immediately obtain the co-operation of the grocer next door and thence would go the sales of weaning foods and baby powder and all the other "under-fire" sales upon which so many retail chemists largely depend for their income. And if any should doubt this assertion, it is a *fait accompli* in at least one neighbourhood.

RATIONALL

EDUCATIONAL POLICY

SIR.—Your leading article "Training Students for What?" (*C. & D.*, July 24, p. 85) is both timely and courageous. It merits serious consideration by our leaders in pharmacy if they desire the continuation of the "retail" pharmacist as an entity in the community. The present educational system is producing a person who has no place in our present make-up—lacks practical shop experience and is full of theory and nothing else. I send you congratulations on your effort and trust it may have the effect of bringing those responsible to a saner outlook.

GLASGOW, C.3

A. MACSWEEN

TIME OFF FOR STUDY

SIR.—At the July meeting of the Council of the Pharmaceutical Society of Northern Ireland, Mr. Shinner is reported as having asked whether employers would have to give further hours off to apprentices taking further courses of study (*C. & D.*, July 24, p. 81). Surely that question does not arise as, according to the regulations, the apprentice in his fourth year is entitled to attend a full-time course of study. Therefore an apprentice who is working in the shop and attending revision classes during part of his fourth year is spending more time in the shop than the employer is entitled to under the regulations.

BELFAST CHEMIST

MINIMUM OPENING ORDERS

SIR.—Every day that passes in working in chemists' shops I become more and more amazed at the cringing attitude of chemists—the way they will permit their suppliers to kick them around and then turn with their palm upwards begging for more. I refer to a toilet house whose name I will not mention. The sales method of this house is as follows: Should you approach them to purchase, they will adopt an attitude of investigating the ancestry of one's forebears, and then, after a short period of time, grudgingly accept the account. By that time the chemist feels that he has had an honour bestowed upon him. Then they come with the minimum opening order. It is colossal, and the poor fool does not at once realise that 60 per cent. of it will probably remain on his shelves never to move again.

LONDON, N.W.9

H. JUDD

STATUS OF CHIROPODISTS

SIR.—I refer to the paragraph entitled "Chiropody" in your issue of July 24 (p. 99) and I quote:—

"To gain admission to the National Register of Medical Auxiliary Services, it is necessary to pass the examination of the Society of Chiropodists, 21 Cavendish Square, London, W.1."

That statement may imply that a National Register of

Medical Auxiliary Services exists by Statute. Although it is known that the Minister of Health has set up a Working Party to evolve a scheme for the statutory registration of medical auxiliaries, no such register has so far been compiled. I feel sure that it was not your intention to infer that our contemporary society enjoys advantages not extended to this Council, and that you would like to publish this clarification of the position as it applies to chiropodists.

LONDON, W.1

S. G. SHIPPER, *Secretary*,
JOINT COUNCIL OF CHIROPODISTS
OF GREAT BRITAIN AND IRELAND

OFF COLOUR

SIR.—I fear "Committeeman's" suggestion (*C. & D.*, July 24, p. 83) that expensive prescriptions be written on a form of special colour would have the opposite effect to that intended by him. It would soon become known among patients that, say, a blue form meant an expensive medicine and a white form a cheap one, and doctors would be under strong pressure for blue forms! "Little Tommy next door had a blue form from his doctor, why can't my Freddie have one too?" From the beginning of National Health Insurance there have been doctors who seek to attract patients and build up a practice by lavish prescribing, and the proposed coloured form would play into their hands. Anything on a white form would tend to be regarded by the public as "utility" medicine—not the best. There are too many people already who look on the National Health Service as a "utility" service, a tendency which the Department is fostering by its campaign against proprietaries.

EDGWARE

F. F. MARCHBANK

DEVICES TO SAVE TIME AND MONEY

SIR.—Your publishing of my letter about an unusually fitted mortar (*C. & D.*, June 5, p. 583) prompts me to point out that many such devices exist in pharmacies and hospitals. Some of them should be more common. One chemist used widemouth bottles and specially made aluminium funnels to speed up stock-mixture production, but that I do not recommend. My conviction is that mixtures should be as fresh as possible, and that seems to me to mean as few stock mixtures as possible, and that what there are should never be over eight days old when emptied. Mist. mag. trisil co., for instance, settles in to most difficult lumps, and children's mixtures ferment and hydrolyse. Yet chemists ought, perhaps, to do quite a bit more manufacturing than they do. If the tools were available they probably would. I have seen a simple moisture meter using cobalt salts that seems probably better at under twenty pence than the expensive apparatus mentioned by your contributor Stockman (*C. & D.*, July 10, p. 39). Do you know if any such "colorimetric devices" are sold in Britain?

SHERINGHAM

J. DENNIS

MOISTURE TESTS ON GRAIN

SIR.—While grateful to your contributor, Stockman, for mentioning our Quicktest moisture meter (*C. & D.*, July 10, p. 39), especially as he is of the opinion that it is the simplest instrument to operate, may I be allowed to make a few remarks regarding his statement that the tester "gives unreliable results on freshly bagged corn"? I feel sure that your contributor has based this detrimental remark, not on actual experience, but rather on the belief that an instrument of this type, which after all "only" takes the intergranular relative humidity of the air without pregrinding the grain (as every other moisture tester mentioned in the article requires), can only give correct readings if inserted into grain which had had time to settle. His conclusion, however, does not stand, as there is no evidence whatsoever that grain will not reach equilibrium within three minutes after being mixed, while there is ample evidence that the Quicktest moisture tester gives accurate results irrespective of the time the grain was placed into the container. Also it has been proved that surface moisture on the grain does not influence the accuracy of the instrument, which shows an average result of the grain moisture content even if surface moisture is being encountered. I would refer your readers to a test report

of the National Institute of Agricultural Engineering, where the first paragraph of "discussion of results" contradicts your contributor's assumption. Conclusion No. 5 of technical memorandum 71/GD/52 of the National Institute of Agricultural Engineering also refers to the question. Finally, my experience with the Quicktest is that the only difference in practice between testing grain stored for a considerable time and grain just bagged is that in the freshly filled bag of grain the instrument reaches final

equilibrium faster, the accuracy remaining unchanged.
LONDON, W.1

S. A. COLMAN, A.M.I.B.A.E.,
OPANCOL, LTD.

APPRECIATION

I FOUND James Grimm's articles most interesting and helpful, and his suggestions were often my guide to the type of fixtures to use, and also for many of the window fixtures.—J. B.

SUBSTANCE "M"

BY L. R. C. HAWARD, D. PSY. (LEYDEN), M.A., B.Sc., A.B.Ps.S., A.M.INST.E.

IN spite of the many years that have elapsed since schizophrenia—the most common of all mental illnesses—was first isolated as a discrete diagnostic entity, the understanding of it by contemporary psychiatry is still slight, and useful information on it woefully scanty.

That is not because problems concerning it have been ignored or evaded by clinical investigators. On the contrary, schizophrenia, more than any other mental disease, has received the fullest possible attention of medical research. Nevertheless, the bewildering variety of circumstances under which it may appear, and the numerous forms it may take, have long been an almost insuperable barrier to a scientific investigation of the subject as a whole.

A Different Approach

For this reason, a completely new approach to the problem, launched by Drs. Osmond and Smythies¹ formerly of the National Hospital, Queen's Square, London, has captured the interest and imagination of clinical scientists all over the world. That this approach is both new and different is readily apparent, for these doctors and their research colleagues are *not* studying schizophrenia. Instead they are trying to find a way of inducing it! Basing their line of study on the, as yet unproved, hypothesis that the disease is caused by some physiological agent produced in the victim's own body, these investigators, backed by chemical and pharmacological laboratory teams, are attempting to synthesise an unknown substance, which has been christened "substance M." This hypothetical substance must be capable of producing a symptomatology identical with that of schizophrenia, and must be the product of some metabolic process, though that will probably be an abnormal one when and if it is eventually isolated.

That schizophrenia may have a physiological basis is not a new idea in itself. Fifty years ago pioneers in this field of medicine held the belief that dementia praecox, as it was then called, had an organic origin, but all their efforts to substantiate that belief failed. Today, research into the physiological concomitants of mental disease is being pursued in top-ranking research centres in this country and abroad. The researches differ from the Osmond-Smythies approach, however, since they are all concerned with known metabolites, such as the 17-ketosteroids², corticoids³, benzoic acid⁴ and hippuric acid⁵, to name but a few.

The first substance investigated in the new approach was mescaline, and it is believed that the unknown substance must be related in some way to it—hence the "M." Mescaline, an alkaloid extracted from the peyotl or American cactus, first attracted attention by the similarity of its symptoms with those of schizophrenia, and those who have read Huxley's book describing his experiences under the influence of this drug will understand why it became first choice. True, the reaction to mescaline differs in different people, but no more than do schizophrenia behaviour patterns.

There is one *sine qua non* that eliminates mescaline from its position as favourite, however, for it is not capable of metabolic production. While it must be ruled out, it has been noticed that its chemical composition is not very

dissimilar from that of adrenaline, which plays such an important part in human mental and emotional make-up.

From that step has been hypothesized a specific disorder of the adrenals occurring in schizophrenia in which a failure of metabolism occurs and leads to the production of a mescaline-like substance—substance "M." That metabolic breakdown could perhaps be related to overworking of the adrenals or to an inherited but latent weakness. M-substance, once produced, would set up a vicious circle, since one of the prominent features of mescaline psychosis and some schizophrenic processes is the stress and terror experienced by the subject, and they in turn throw an additional burden on to adrenal functioning.

To test the hypothesis, a chemical and pharmacological investigation is taking place into the breakdown products of mescaline, and the range of these products between mescaline and adrenaline. In addition, attempts are being made to isolate those substances from the body fluids of acute schizophrenics; although nothing definite has yet emerged from this part of the programme, Fisher⁶ has shown that the serum and urine of schizophrenics is significantly more toxic to tadpoles than that from normal individuals, and that confirms the view that the interest is being focused in the right direction.

In searching for related hallucinogens—that is, substances that produce hallucinatory experiences—five possible plant alkaloids have been studied: mescaline, lysergic acid diethylamide, harmine, ibogaine, and hashish, the first four possessing an indole nucleus but not being found in the body. Subsequent investigation has shown that "pink adrenaline," containing adrenochrome, is related chemically to every hallucinogen whose chemical composition has been determined: it has an indole nucleus, is readily derived from adrenaline in the body, and can be fitted into a logical scheme relating to stress and the adrenaline-adrenochrome change.

A recent paper⁷ detailing results of the past year's work on this problem, shows that solutions of adrenochrome, when mixed with the subject's own blood and injected intravenously, produce a range of reactions similar to those of mescaline and lysergic acid, but the effects last longer and appear to be more insidious. Of particular interest is the way in which perception of time and distance is subtly altered.

Because of its extreme instability, adrenochrome has not yet been isolated from the body, although it probably occurs there; it is in fact the first such substance demonstrated to have hallucinogenic properties, as well as producing electro-encephalograph changes and inhibiting the respiration of brain tissue. The struggle to understand schizophrenia has thus moved from the bedside to the chemical laboratory, and chemical synthesis may yet provide an answer to the question of the day: "Is substance 'M' adrenochrome?"

REFERENCES:

1. *J. ment. Sci.*, 1952, 98, 309-15.
2. A.M.A., *Arch. neurol. Psychiat.*, 1953, 69, 470-85.
3. *D. Neurol. Psychiat.*, 1953, 21, 229.
4. *J. ment. Sci.*, 1954, 100, 145-48.
5. *D. Neurol. Psychiat.*, 1954, 22, 222.
6. *Science*, 118, 409-10.
7. *J. ment. Sci.*, 100, 29-45.

HOSPITAL PHARMACY FORUM

Representation and Influence of Hospital Pharmacy at REGIONAL LEVEL

IT is to be hoped that by now most hospital pharmacists will have obtained and studied the report of the Central Health Services Council. Of its twenty-eight pages no fewer than nine are devoted to pharmaceutical matters. They lay emphasis on the importance of the pharmacist's contribution to the service, and it is probably the first time such stress has been laid upon that contribution in an official document. Most of the space is taken up by a summary of the "Linstead" report, which has been fully commented upon (see *C. & D.*, July 17, pp. 57 and 61).

For and Against Group Pharmacists

A feature of the recommendations that must be engaging the minds of many of us is the one relating to the structure of the pharmaceutical service at regional level. Among pharmacists there is no clear policy in this matter, though the subject has been discussed often enough. It would appear that some regard the appointment of a group pharmacist or a regional advisory pharmacist as a threat to the status and responsibility of the individual hospital pharmacist, and it must be recognised that the setting-up of a hierarchy of that kind does involve the risk of remote control and a temptation to "empire building." Nevertheless, the fact that pharmacy has failed to gain the recognition it should have in the hospital service is largely due to there being no coherent representation at the higher administrative levels. Decisions closely affecting the conduct of pharmaceutical departments are taken by administrators and sometimes by medical men who have no knowledge of the problems involved. A noteworthy example was the recent attempt by the pathologists in the Bristol area to set up control over the production of injectable fluids. If regional supervision is important—and most of us would agree that it is—then such supervision and advising must be done by those who have first-hand experience of the problems involved, i.e., by the pharmacists.

The alternative to appointing a regional officer is the setting-up of a regional committee of pharmacists, which would in turn choose its officers and spokesman to represent it at regional meetings with other professional groups. That is the pattern followed by the medical profession, and though attendance at committee meetings can be boring and wasteful of time, it seems to bring the greater satisfaction. At least everyone feels he has some opportunity of contributing to policy-making.

Some attempt has been made recently to set up such regional committees. Their chief function so far has been to organise purchasing arrangements, though it is to be hoped that, in due course, other matters will come under review. One serious problem that must be faced is staffing, which was discussed in this column last month. Another is the rationalisation of practical training of post-graduate students in pharmacy. The task of setting-up a buying organisation, however, seems to have been the feature that has most readily commended itself to the administrators, and it is on that basis that the regional groups have received some degree of official blessing. Pharmacists taking part in these schemes must, however, beware of the dangers inherent in them. The responsibility for keeping down prices is an important one and not to be treated lightly, yet there is the danger that too great an emphasis may be put upon it. If, for example, tenders are to be invited from a very wide selection of suppliers, what steps are to be taken to ensure that the goods are of a suitable quality? The responsibility for quality is, to the pharmacist, far more important than price. There are firms springing

up that offer pharmaceutical materials well below the general market price. Much of the material is of foreign origin. The suppliers are often mere factors having no control laboratories and making no "service" contribution to pharmacy and medicine in this country. There is surely a moral responsibility upon the pharmacist to inspect the laboratories of his suppliers and to be satisfied that he can rely on the warranty normally accepted in the trade. Indeed, in model Government contract forms the supplier is required to allow inspection of his premises and to guarantee that the conditions under which his work is carried out are satisfactory. Unless that warranty is assured, the buying organisation must set up its own analytical laboratory and must carefully scrutinise all samples and deliveries. That, of course, would be an expensive procedure, and would greatly offset the advantages obtained by the lower prices. Another danger in group—or regional—purchasing is that the administrative costs may, unless carefully watched, swallow up the "profits." At present, much of the administration work is being undertaken voluntarily by individual pharmacists who are keen to make the system work. It may reasonably be assumed that, as this method of buying gathers momentum, additional help will be needed in order to cope with the correspondence, checking of invoices, sampling, and all the other necessary jobs that must arise. Careful costing of the overheads involved should be carried out at an early stage if the system is to be really worth while. After all, something of the order of one-third of all expenditure on drugs is taken up by specialities, which are not competitive in the market; and something like 20 per cent. goes on antibiotics, for which central contracts are arranged. On those, the savings by group buying must be severely limited. The remainder of the drug bill is split up among several hundreds of items, which are used in small amounts and cannot bring enormous economies even if bulked for a large group of hospitals. It is therefore important to select the range of materials to be dealt with so as to avoid unproductive work done merely to give an appearance of keenness.

Regional Reviews

Groups of pharmacists, whether at regional or at group level, who are giving attention to such matters are performing a valuable service, and should be encouraged. Whatever form the pharmaceutical service may eventually take, it is fairly certain that the Minister will urge the regions quite soon to begin a review of their own. A most encouraging lead has been given by the Linstead committee, and it is to be hoped that the follow-up will bring into being a service of the standard we have long hoped for.

PRESCRIPTION PROBLEM

Ref. J. C. 1/1/1954
8-

Ref. to SE
Ref. to SE *50*

A MODERN COURSE OF PHOTOGRAPHIC STUDIES

By

H. BAINES, D.Sc., F.R.I.C., F.I.B.P., HON. F.R.P.S.

7. AFTER-TREATMENT OF THE NEGATIVE

A NEGATIVE may not be an ideal one from which to produce a high-quality print. It may have been incorrectly exposed or processed, or it may be marred by stains, spots, or other blemishes. There is little excuse with modern negative materials for serious errors in exposure. The safety factor in assessing exposure guards against under-exposure, and the latitude of negative materials necessitates exposures of hundreds of times the minimum correct exposure before print quality seriously deteriorates — though long before this point excessive density will greatly prolong printing time. Variations in development result in differences in contrast and average density, but positive materials are nowadays supplied in such a wide range of contrasts that negatives covering very different density ranges can be accommodated.

Nevertheless, if it is desired, it is possible to reduce the density of a negative by oxidising some of the metallic silver of the image to a silver salt and dissolving the latter in a suitable solvent. The process of reduction of density was quite logically called by photographers "reduction." It is unfortunate that chemists use this same term for, among other processes, the production of a metal from its salt. Photographic reduction is achieved by oxidation, which is the exact converse of chemical reduction. Where ambiguity is likely to arise, therefore, the term "reduction" should be prefixed by the word "photographic" or "chemical," as the case may be.

It is also possible to increase or intensify the densities of a negative by image-wise deposition of silver or other material on the metallic silver of the image, or by conversion of the image silver into some other substance of higher photometric constant, i.e., of greater light-stopping power. This process is known as intensification.

Reduction

Photographic reduction is carried out by treating the negative in a bath of oxidising agent plus solvent until sufficient silver of the image has been removed. The end point is normally assessed by inspection. Some oxidising agents, such as potassium permanganate and sulphuric acid, or potassium bichromate and sulphuric acid, convert the metallic silver into a salt that is soluble in water (in the cases cited, the soluble salt is silver sulphate), so that the only solvent required is the water in which the reducer is made up. Other oxidising agents, such as potassium ferricyanide or ferric chloride, convert the silver into insoluble salts (silver ferrocyanide and silver chloride respectively),

so that it is necessary to include in the reducer a solvent for silver salts, usually hypo.

Different reducing solutions act in different ways. Some lower all densities by an equal amount, and are called "subtractive reducers." The contrast of the negative is thus substantially unaltered after reduction, and this treatment is therefore most suitable for those negatives whose high density is due to gross over-exposure, but which have been correctly developed to the right contrast. A typical example of a "subtractive" reducer is Farmer's reducer, made by adding sufficient strong potassium ferricyanide solution to plain hypo, to colour it yellow.

Other oxidising agents oxidise silver roughly in proportion to the amount of silver locally present in the image. Densities are therefore reduced by the same *proportion*, irrespective of the original density. Such reducers are called "proportional reducers." A typical example is a mixture of potassium permanganate and potassium persulphate solution, acidified with sulphuric acid. Proportional reducers thus reduce the contrast of a negative as well as its general density, and are therefore most suitable for correctly exposed, but over-developed negatives. As a rough generalisation, it may be stated that proportional reduction undoes development.

Finally, some oxidising agents exhibit a third type of behaviour. In this case oxidising action seems to be strongly catalysed (or accelerated) by the metallic silver of the image. The reduction ratio is therefore greater for the higher than for the lower densities, and this type (of which ammonium or potassium persulphate with sulphuric acid is an example) is called "super proportional." Superproportional reducers are most suitably applied to those negatives in which attempts have been made to correct for under-exposure by overdevelopment, since here the aim is to reduce contrast while affecting as little as possible the shadow densities.

Recently (1952) a new and valuable reducer has been added to our armoury. It is well known that a negative left too long in a fixing bath is liable to undergo reduction of density. The silver image undergoes aerial oxidation and the hypo dissolves the resulting compounds. Henn, Crabtree and Russell found that that density reduction is much more rapid in ammonium thiosulphate than in hypo (sodium thiosulphate) and more rapid still in acid solution. They therefore recommend a solution of ammonium thiosulphate and hardener, acidified with citric acid, as a most controllable proportional reducer.

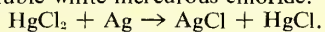
It should be reiterated that only in special circumstances should general reduction of a negative be necessary, but local reduction of highlights of a negative is a very valuable technique. Interior views, for example, frequently embrace an extremely wide brightness range, the compression of which to the confines of the density range of printing papers would result in an unfortunate reduction in overall contrast. A much more pleasing effect may be produced by locally reducing the highlight densities of the negative. That is done by soaking the negative in water and applying the reducer locally by such means as a swab of cotton wool.

Intensification

Intensification can be used only to raise contrast to a level necessary for successful printing. Since intensification merely increases density, it cannot produce shadow detail where such detail is not already present—it can merely enhance such detail and raise it from a non-printable to a printable level. Correction for underexposure is therefore very limited. Intensification may be achieved in several ways. The image may be enhanced by deposition of silver or mercury metal on the silver image by immersing the negative in a solution containing a chemical reducing agent (e.g., developer) and a silver or mercury salt. The silver image grains act as nuclei for that reduction. The process is called physical intensification and is analogous to physical development.

In chemical intensification, the silver image is oxidised to silver halide by an oxidising agent which is itself reduced to an insoluble compound thereby. The augmented image is then chemically darkened. As a typical example mercury intensifier may be quoted, though salts of mercury, chromium, copper, lead and uranium all act as intensifiers.

The image of a negative becomes white when the negative is immersed in a solution of mercuric chloride (corrosive sublimate). The silver has been converted to silver chloride and the mercuric chloride round each grain has been converted to insoluble white mercurous chloride.



After thorough washing the white image may be blackened by ammonia. If the image is blackened by developing in a developer containing no sulphite, silver and mercury metals are quantitatively produced, and the process may be repeated as often as desired, every silver atom of the image acquiring 1, 3, 7, (2^n-1) atoms of mercury after 1, 2, 3 or n stages of intensification.

A valuable single-solution intensifier was described by Muehler and Crabtree in 1945. It is known as the quinone-thiosulphate intensifier, and it produces a greater degree of intensification than any other known single-solution intensifier, the maximum intensification being of the order of ten times.

In general, intensification gives rise to increased graininess and, unless it is carefully carried out, it is liable to produce local irregularities.

Every manual of photography emphasises the necessity for clean and careful working. This is of importance because of the ease with which negatives may be spoiled by spots and stains, and it is much easier to prevent their occurrence than to eliminate them once they are formed.

Spots

Spot-forming impurities may be present in the sensitive material as purchased, but, because of the elaborate precautions and extensive testing by manufacturers, the chance of encountering such defects is reduced to negligible proportions. Spots are normally due to particles of air-borne or liquid-borne impurities that come in contact with the sensitive material. Even inert dust may cause blemishes if it is present on the material during exposure. To avoid white spots on the negative which are the shadows of such specks, the interior of the camera should be periodically cleaned. Other types of dust are more dangerous, since they may have an adverse chemical effect on the negative material.

Rusty pipes or corroded copper may give rise to specks which may be either air-borne or liquid-borne, and which cause serious damage to films or plates. Black spots may arise from particles of solid developer, if the developer has not been properly dissolved, or if a cloud of powdered developer results from careless weighing-out in the dark-room. Finely divided oil globules may be present in air or liquid and, if they come in contact with sensitive material, they locally prevent development and fixation. Another fault that may arise takes the form of sharp-edged white spots due to airbells trapped on the surface of the plate or film. This fault is overcome by careful introduction of the material into the developer, but the fault is much rarer than it used to be, owing to the prevalent use nowadays of wetting agents in processing solutions.

In general the best means of obviating spots are prophylactic, but white spots are removed from a processed negative by local application of a pigment by means of a brush, and black spots by locally removing the excess silver (and gelatin) with a knife blade.

Stains

Finger marks are a common defect on home-processed materials. While one can with relative impunity touch the surface of a dry negative material with clean dry hands, it is a practice that should be avoided as much as possible. If the fingers are damped by processing solutions, or even

by perspiration, the finger print will almost certainly appear on the processed negative. Dilute hypo introduced locally before development by a contaminated clip or by dirty hands usually produces devastating stains. Under the category of stains may be considered "dichroic fog," a deposit of finely divided silver which is so called because it appears different in colour when viewed by reflected and transmitted light. Silver appears in this yellowish, finely divided state when it is formed by the action of developer on silver salts that have gone into solution. It is thus liable to be formed when the developer contains a solvent such as hypo, ammonia, or excess of sulphite, but it is more commonly formed if the film, saturated with developer, is passed without intermediate rinse or stop bath into a neutral hypo bath, and especially if the latter is exhausted.

Another form of fog blemish is known as aerial fog. It is formed if the material is developed near the surface of the developer, with insufficient agitation. The surface layer of developer, rich in dissolved oxygen, can cause spontaneous fogging of the film. Although aerial fog is generally black in colour, it is, by the nature of its formation, usually patchy. Such silver fogs are, of course, best avoided but, if formed, they can be removed by the judicious application of a photographic reducer. The image is, of course, attacked to some extent, but the fog—especially the finely divided dichroic fog—is preferentially removed.

Other Defects in Negatives

If a wet processed and washed plate or film is allowed to dry, the surface water may collect in droplets and cause locally much longer drying time. The result may be a permanent "drying mark" on the negative. Drying marks may be prevented by removing surface water, either by wiping with chamois leather before drying or by a final dip of the material in water containing a wetting agent. The latter reduces surface tension and allows surface water to drain uniformly without collecting in droplets. Drying marks, once formed, may sometimes be removed or decreased by rewetting and drying correctly.

Negatives may appear opalescent, a defect that may arise from several causes. A hardener bath that has been allowed to become too alkaline may cause a deposition of aluminium hydroxide. An acid rinse will remove that scum. Hard water may cause a deposition of calcium carbonate during washing, and that also may be removed by acid rinse. Gelatin of the emulsion or backing may become reticulated, i.e., show a pattern of minute hills and valleys. The gelatin during processing is subjected to the action of solutions that cause alternate swelling and contraction, and if the contraction becomes too violent the surface may become permanently deformed. Swelling and contraction depend upon the nature of salts in solutions, their concentration, the degree of acidity or alkalinity, and the temperature, and reticulation is normally avoided by ensuring that processing solutions and wash water are at approximately the same temperature. Another type of opalescence may be due to forced drying by immersion after washing in alcohol. To avoid this, it is recommended that the alcohol solution should be not stronger than 80 per cent. If opalescence is caused by alcohol dehydration, it may be cured by re-immersion in water and normal drying.

CANADIAN SUBSIDIARIES.—The Board of Trade has produced a fourteen-page pamphlet for the guidance of companies that may be considering the setting up of subsidiary organisations in Canada. It touches on most of the more important factors which have to be taken into account, as for example:—Application to the Bank of England and Treasury; the difference between Dominion and Provincial registration; solicitors' fees and fees for incorporation; selection of a name; and Federal, Provincial and other taxation. It includes an appendix listing useful contacts in the Provinces of Canada. The pamphlet will be sent free on request to the Board of Trade, Commercial Relations and Exports Department, Room 4170, Horseguards Avenue, London, S.W.1.

A DRUG FACTORY AT BOMBAY

Health Minister at opening ceremony

THE Minister for Health, Government of India (Mr. Rajkumari Amrit Kaur) opened a new factory of Parke, Davis & Co., Ltd., in Bombay, on July 8. Among those present were Bombay's Health Minister (Mr. Shri Shantilal Shah), Lieutenant Colonel C. K. Lakshmanan (director-general of health services, New Delhi), Mr. W. T. Turner (U.S. consul general in Bombay), Dr. Jal Patel (physician to the President of the Republic) and representatives of the Government, army and navy medical services, medical, pharmaceutical and trade associations.



MANUFACTURE IN INDIA: Mr. W. G. Lloyd (general manager, Parke Davis & Co., Ltd., Bombay) presenting to Rajkumari Amrit Kaur (Minister for Health, Government of India) 50,000 Chloromycetin Kapseals and 100,000 Camoquin tablets, after the Minister had performed the opening ceremony of the company's new plant in Bombay for the manufacture of Chloromycetin and other important medicines.

Welcoming the guests, Mr. W. G. Lloyd (general manager, Parke, Davis & Co., Ltd.) traced the progress of the organisation as a whole, including that of the company in India, where it had advanced from a comparatively small staff to the present strength of about 200. Describing the new unit he said that its three-story structure was partially air-conditioned for special low-humidity manufacturing and had approximately 15,000 sq. ft. of space. The reinforced-concrete and brick building housed a lunch room, quality control laboratory and bonded manufacturing and warehouse section as required by Indian law for alcoholic preparations. At the conclusion of his speech, Mr. Lloyd presented to the Union Health Minister on behalf of the company 50,000 vials of Chloromycetin and 100,000 tablets of Camoquin valued at over Rs. 60,000. After the opening ceremony, forty-four members of the company's staff who had completed ten or more years' continuous service were awarded long-service pins. Five of that number had completed more than twenty-five years' service and were the recipients of a gold watch each.

MR. RAJKUMAR AMRIT KAUR said that he was glad to find that the company had adopted the policy of employing Indians in their laboratory, which would constitute an excellent school for the country's young men and women.

It was no doubt true that for the improvement and expansion of medical relief and for the prevention of disease, an adequate number of trained doctors, pharmaceutical chemists and other ancillary personnel was

necessary. Second in importance only to the provision of such staff must come the supply of drugs and medical appliances without which doctors and public health workers might well be reduced to a state of virtual impotence in the exercise of their profession. He was fully aware that though the general supply position of drugs in India was satisfactory, there was still a considerable lack of even essential drugs and equipment not only in the dispensaries in the far-off villages, but even in some of the district hospitals. Even those drugs and appliances, which should be in almost daily use, were often not to be had at all or only in such limited quantities as to paralysed the administration of effective medical aid. In many instances they are not available at a reasonable cost and that naturally prohibited or at least greatly restricted their legitimate use in medical treatment. He was distressed that, because of monopolies exercised by certain agencies, the prices of drugs were kept unduly high. It was a matter of great satisfaction that the quinine factories of the Governments of Madras and Bengal were now able to produce that drug in sufficient quantities to meet India's needs and that it was of requisite purity. There was no shortage even though imports were completely banned. It was high time that India became completely self-sufficient in the matter of essential drugs. Any attempt, therefore, made by any agency to produce those in the country itself by utilising the country's labour and raw materials was welcome. He hoped that the production of good drugs in India would lessen the use of "patent" medicines, the plethora of which in all markets alarmed him.

"Exploitation Must Cease"

India had suffered much in the past from a lack of organised control and supervision over therapeutic substances and medical appliances. The unscrupulous had often reaped a rich harvest at the cost of an ignorant public. Such exploitation must cease.

The Drugs Act, 1940, provided for control over the standards of both imported drugs and drugs manufactured and sold in India. So far as imported drugs were concerned, the present machinery of the Government of India was able to maintain a more or less satisfactory check. Steps were also being taken to make those checks more rigorous by increasing the number of samples of imported drugs taken out for tests. In the manufacture and distribution of drugs, the situation was not so satisfactory. He hoped shortly to take steps to amend the Act, making punishments for offences under it deterrent. It was necessary that the public should co-operate with the authorities in putting down the menace of spurious drugs. He was sure that as pharmaceutical training developed and the trade and profession were manned more and more by people qualified for the purpose, that that evil would be brought under control.

ITALIAN QUICKSILVER

American participation in industry?

CONFLICTING rumours are circulating in Rome about the future of the Italian quicksilver industry, following reports that an American mission had arrived in Italy to study various questions connected with production and exports. The reports were activated by rumours that foreign interests had bought a large number of shares in the Siele Quicksilver Co. and two possibilities are being discussed by the trade:

(1) That a group of American experts is studying the possibility of forming an Italo-American organisation to allocate quicksilver supplies to consumers.

(2) That an Anglo-American group is studying the possibility of negotiating with the Monte Amiata company for setting up a consumer control centre in order to prevent large quantities from reaching Iron Curtain countries.

The Italian Minister of Industry and Trade, in reply to a recent question in Parliament, stated that the Government did not possess sufficient information to judge the truth of rumours that a foreign interest had acquired a majority shareholding in the Siele Co. The Government's policy, he said, was generally to facilitate the export of quicksilver, although an export licence was still required. The licences were granted by the Ministry of Foreign Trade on the advice of a special Ministerial Committee and exports during 1953—even those to Iron Curtain countries such as Czechoslovakia, East Germany, Poland and Hungary—had been approved by the authorities. In the first quarter of 1954, the Minister added, the Government had authorised exports of quicksilver to East Germany and Poland. There were no inquiries for the metal from other Iron Curtain countries.

The two main Italian quicksilver companies (Monte Amiata and Siele) have so far refrained from comment. They both say they know nothing about the visit of a United States mission. Meanwhile, one generally well-informed source believes that the first approaches have already been made between Italian and Spanish quicksilver interests for exploratory talks on the desirability of reviving the old Mercurio-Europeo cartel (see *C. & D.*, June 26, p. 698).

WORLD TRADE

French Fertiliser Prices.—Prices of French nitrogenous fertilisers are being lowered by just over 4 per cent.

Turkish Opium Crop.—Because of a long and severe winter, the opium crop in Turkey this year is estimated as poorer than last year's by about 20-40 per cent.

Egyptian Imports.—The freeing from all restrictions of imports from the sterling area was recently announced by the Egyptian Finance Minister (Dr. Abdel Hamid el Sherif).

Pakistan Imports.—Among items that have been added to the list of goods for which the Pakistan authorities are granting import licences under the official import policy for the shipping period July-December are toilet and medicated soaps and mustard oil.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JULY 28: The continual lack of shipment offers of many important CRUDE DRUGS and the absence of buffer stocks on the spot have brought about firm conditions for many commodities in that market. Among the drugs affected are Cape ALOES, IPECACUANHA, SENEGA, RHUBARB and BUCHU.

Small lots of both old and new-crop BUCHU leaves were on offer at much higher levels than of late. GINGER provided another important price feature of the week with the African rising by 25s. per cwt. and the Jamaican by 5s. There are indications from origin that QUASSIA will be more readily available in the near future.

In PHARMACEUTICAL and FINE CHEMICALS trading was quiet on home and overseas accounts. THEOBROMINE and CAFFEINE, both of which have appreciated in value month by month since January, received a further boost. At 26s. 6d. per lb. caffeine alkaloid, B.P., is 2s. 6d. dearer and theobromine alkaloid at 32s. 6d. is up by 3s. CITRIC and TARTARIC ACIDS continue in short supply.

Prices in the ESSENTIAL OILS market were generally held at previous levels. There was some adjustment in CITRONELLA, and CAJUPUT was easier by 1s. 6d. per lb.

Pharmaceutical Chemicals

ANEURINE HYDROCHLORIDE. — Prices (per kilo) range from £46 for 1-kilo down to £45 15s. for 100-kilo lots.

ATROPINE.—Rates (per oz.) for 25-oz. lots are: ALKALOID, 29s. 10d.; SULPHATE, 24s. 1d.; HYDROCHLORIDE, 31s. 9d.; METHYLBROMIDE, 24s. 7d.; METHYLNITRATE, 33s. 7d. The price for 1-oz. lots is 6d. per oz. more than the 25-oz. rates.

BISMUTH SALTS.—The following are the prices (per lb.) in largest bulk packages:—

	1-cwt.	28-lb.	7-lb.
	s. d.	s. d.	s. d.
CARBONATE ...	23 5	23 8	27 5
SALICYLATE ...	22 6	22 9	26 4
SUBOALLATE ...	21 8	21 11	25 6
SUBNITRATE ...	20 11	21 2	24 4

2-cwt. lots are 3d. per lb. less than the 1-cwt. rates. The present 1-cwt. rates for other salts are:—CITRATE, B.P.C., 22s. 8d.; NITRATE, crystal, 14s. 8d.; OXIDE, B.P.C., 27s. 7d.; OXYCHLORIDE, B.P., 27s. 9d.; OXYDIOGALLATE, B.P.C., 28s. 9d. and TRIBROMPHENATE, B.P.C., 26s. 9d.

CAFFEINE. — Dearer. For 1-cwt. lots. ALKALOID, B.P. is now 26s. 6d. per lb.; ANHYDROUS ALKALOID, 27s. 6d., and CITRATE, 16s. 3d.

GUAIACOLS. — LIQUID, B.P., is 16s. 3d. per lb. for 28-lb. lots; CRYSTALS, 16s. 9d.; CARBONATE, 18s. 3d.

HYDROCYANIC ACID. — Dilute B.P.C. is from 1s. 4d. to 1s. 11d. per lb., as to quantity; Scheeles is from 1s. 8d. to 2s. 3d.

HYDROGEN PEROXIDE. — Manufacturers' price for single carboys of 20 volumes is 4s. 6d. per gall.

PANCREATIN. — 1-cwt. lots, B.P., are now at 8s. 6d. per lb. and U.S.P. at 10s. 6d. per lb.

THEOBROMINE. — Dearer. ALKALOID is now quoted at 32s. 6d. per lb. and the SODIUM SALICYLATE, 20s. 3d. for 1-cwt. lots.

THEOPHYLLINE.—Scarce. 1-cwt. lots of ALKALOID are now quoted at 22s. per lb. and AMINOPHYLLINE at 22s. 6d.

Crude Drugs

ALOES.—Small quantities of prime Cape on the spot are quoted at 212s. 6d. per cwt. There are no actual shipment offers. Curaçao is 305s. on the spot and 290s., c.i.f., for shipment.

BALSAMS.—Quotations (per lb.) are:—Canada: 20s., spot, *Copaiba*, B.P., 11s. 6d., nominal. *Peru*, 9s. in bond. *Tolu* (genuine as imported), 26s. 6d. spot and 26s., c.i.f.

BUCHU.—No shipment offers from any source. Spot supplies are scarce with prices nominal.

CINNAMON.—Ceylon for shipment (c.i.f.), per lb.; OOOO, 3s. 11d.; OOO, 3s. 9d.; OO, 3s. 7½d.; O, 3s. 5½d. firsts, 3s. 1d.; seconds, 3s.; thirds, 2s. 11½d.; quillings, 2s. 0½d.; chips, 6½d.

ERGOT. — Portuguese for shipment, 17s. 6d. per lb., c.i.f., nominal.

GALANGAL.—Root is quoted at 80s. per cwt., c.i.f., for shipment, and spot, 85s. to 90s.

GINGER.—African is dearer on the spot at 220s. per cwt. with shipment offers at 215s., c.i.f. Jamaican No. 3 is 235s. on the spot and 235s., c.i.f.

IPECACUANHA. — Limited quantity of Nicaraguan is offered for shipment at 69s. per lb., c.i.f. Spot supplies difficult to locate.

MENTHOL. — Spot. Chinese is about 28s. 3d. per lb., duty paid; 27s. in bond; and 26s., c.i.f.

MYRRH.—Aden selected sorts are about £14 10s. per cwt. on the spot. Siftings are from £7.

PEPPER. — Firm. White Sarawak is 5s. 9d. per lb. spot with forward parcels quoted at from 4s. 6d. to 5s., c.i.f. Black Sarawak is unchanged at 4s. 7½d. spot and afloat, 3s. 6d. to 4s., c.i.f. Black Malabar, 535s. per cwt., spot and Tellicherry, 555s.

QUASSIA.—Spot quotations for chips are about 45s.

SARSAPARILLA.—Jamaican native red is quoted at 2s. 7½d. per lb., c.i.f. Spot is from 2s. 9d. to 2s. 10d.

SEEDS.—(Per cwt.). ANISE.—Cyprian, 165s.; Bulgarian, 137s. 6d., duty paid, all spot London. CARAWAY.—No interest shown in Dutch, sellers quoting 145s., duty paid, in London. CELERY.—Indian is easier on spot because of the low prices quoted for shipment. 165s. now quoted spot London. CORIANDER. — Market is firm. Spot, Moroccan is 60s., duty paid and 55s., in bond; English, 75s., nominal. Shipment: Moroccan new-crop is 48s. 6d., c.i.f. and bids under that figure have been refused for July-August. CUMIN.—Steady on spot with some shipment prices advanced by 5s. Spot, Cyprian, 125s.; Moroccan, 127s. 6d., duty paid; Indian, 140s. Shipment, Moroccan is firm at about 110s., c.i.f. and Cyprian, 115s., c.i.f. DILL.—Indian quoted 87s. 6d. spot London, with no business reported. FENNEL.—Sellers quoting 87s. 6d. for Indian and 85s., duty paid, for Chinese, spot London. FENUGREEK.—Steady with Moroccan on spot at 47s. 6d., duty paid. MUSTARD.—English 65s. to 85s. according to quality.

SENEGA. — A parcel near at hand is offered at 18s. 6d. per lb., landed terms. shipment not offered.

SENNA. — *Tinnevely* LEAVES, (per lb.) prime No. 1, 10½d. to 1s. 1d., as to crop; prime No. 2, 9d. to 11d.; prime No. 3, 7½d.; f.a.q., No. 3, 6½d.; PODS, f.a.q., 7d. to 7½d.; hand-picked, 1s. 6d. to 2s. *Alexandrian* manufacturing pods, 1s. 10d., spot and 1s. 7d., c.i.f.; No hand-picked spot or forward.

SHELLAC. — Spot quotations are:—F.O.T.N. pure, 330s.; F.O. standard No. 1, 355s., nominal; fine orange, 375s. to 410s. per cwt., ex-London warehouse.

TURMERIC.—Madras finger on the spot, 137s. 6d. per cwt. Shipment is unchanged at 128s., c.i.f. Rajapore is 125s., c.i.f., for August shipment.

WAXES. — BEES' — Dar-es-Salaam, spot, 510s. per cwt., with July-August shipment, 500s., c.i.f.; Sudanese, 480s., duty paid and 435s., c.i.f.; Abyssinian, spot 487s. 6d., duty paid, and shipment, 435s., c.i.f. Benguella, 450s., c.i.f., prompt shipment. CANDELLA.—Spot is 637s. 6d. per cwt. CARNAUBA.—Prime yellow on the spot is 980s. per cwt., shipment, 925s., c.i.f.; fatty grey is 675s. on the spot; shipment, 647s., c.i.f. MONTAN. — Reibeck, crude, 105s. per cwt., spot. SPERMACEI.—Case lots are about 1s. 9d. per lb.

Essential and Expressed Oils

CAJUPUT. — Spot supplies are 14s. per lb. for 1-cwt. lots.

CITRONELLA. — Prices (per lb.) are:—Ceylon, spot, 5s. 9d.; July shipment, 5s., c.i.f.; Java, 7s. 3d., in bond; shipment 7s., c.i.f.; Formosa, 6s. 9d., in bond, and 7s. 1d., c.i.f.

CLOVE. — Madagascar leaf is 11s. 6d. per lb., duty paid, and 10s. 1d., c.i.f., for shipment. Redistilled stem oil from 19s., and English distilled bud oil is now offered at 45s.

LAVANDIN. — Spot values are from 13s. 9d. per lb.

LEMON.—B.P. (4 per cent. citral) on the spot is 38s. to 39s. per lb. Californian, 35s. 3d. to 52s. 3d., c.i.f., as to quality, subject to licence.

PINE.—*Pumilionis* on the spot is from 16s. per lb.; *sylvestris*, 9s. Siberian (*abietis*), 9s. 6d.

SAGE.—Spanish is offered at from 9s. per lb. and Dalmatian at 50s., duty paid.

SANDALWOOD.—Mysore is from 65s. per lb. as to quantity; East Indian, 62s. 6d.

VETIVERT. — Bourbon in original drums on the spot is 92s. 6d. per lb.

UNITED STATES REPORT

NEW YORK, JULY 27.—Natural powdered CAMPHOR rose by five cents to 65 cents per lb. MENTHOL showed an easier tone, with the Brazilian material dropping to \$7.30 per lb., down 10 cents. Verona ORRIS ROOT was quoted at 35 cents per lb. (up five cents), while IPECACUANHA ROOT was priced at \$7.75 per lb. locally (up 25 cents).

The market for ESSENTIAL OILS was mixed. Higher per lb. were Ceylon CITRONELLA at 90 cents (up five cents); CLOVE LEAF, \$1.65 (10 cents); and CEDAR LEAF, \$2.35 (10 cents). Lower per lb. were Dalmatian SAGE at \$5.50 (down 50 cents); GRAPEFRUIT, \$2.40 (10 cents); CORIANDER, \$16.25 (50 cents); terpeneless SPEARMINT, \$9.25 (75 cents); terpeneless distilled LIME, \$51.00 (\$1); GARLIC OIL was reduced to \$7.00 per oz. (80 cents).

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," July 14

For insecticides and fungicides all for use in horticulture (5)

POMARSOL, 730,045, by Farbenfabriken Bayer, A.G., Leverkusen, Germany.

For pharmaceutical preparations for human use (5)

MYCIFRADIN, 730,122, by Upjohn of England, Ltd., London, W.1.

For preparations for killing weeds and preparations for inhibiting the growth of plants (5)

CHIPKO, 730,182, by Chipman Chemical Co., Ltd., London, S.W.1.

For medicinal preparations and antitoxic preparations (5)

ORATREN, 730,192, by Farbenfabriken Bayer, A.G., Leverkusen, Germany.

For photographic apparatus and instruments and parts of and fittings for all such goods (9)

SERIOSCOP, 718,328, by Agfa Camerawerk, A.G., Munchen, Germany.

For industrial-chemical apparatus and instruments (9)

DEXATHENE, 729,861, by Dexine Rubber & Ebonite, Ltd., Rochdale, Lancs.

For barometers and thermometers (9)

LORISTER, 730,051, by Bester (London), Ltd., London, N.W.6.

For muscle relaxant preparations for use in medicine and pharmacy (5)

TOLSERAM, 728,895, by E. R. Squibb & Sons, Ltd., London, W.1.

For anthelmintics being pharmaceutical preparations (5)

ASCAWAY, 729,100, by Boots Pure Drug Co., Ltd., Nottingham.

For vermin exterminating preparations (5)

PIVALYN, 730,141, by Motomco Inc., N.Y., U.S.A.

From "The Trade Marks Journal," July 21

For chemical products used in industry, science and photography (1)

EURON, 718,550, by Farbwerke Hoechst, A.G., vormals Meister Lucius & Brüning, Frankfurt - am - Main - Hoechst, Germany. ACELLA, 720,673, by J. H. Benecke, Hannover-Vinnhorst, Germany.

For all goods (1)

MARPHIL, 726,373, by Martin Philipsen & Co., Ltd., London, W.1.

For starch for use in manufacture (1)

TULIP, 726,502, by Latenstein's Fabrieken, Koog-aan-de-Zaan, Holland.

For preserved micro-organisms and their enzyme systems for use in aerobic and anaerobic treatment of sewage and industrial wastes (1)

BIONETIC, 726,834, by Reliance Chemicals Corporation, Texas, U.S.A.

For chemical products used in industry (1)

ALKANOL, 729,586, by Milton Antiseptic, Ltd., London, N.7.

For perfumes, toilet preparations (non-medicated), cosmetic preparations, dentifrices, depilatory preparations, toilet articles (not included in other classes), sachets for use in waving the hair, soaps and essential oils (3)

VAL-PAK, 729,370, by the International Import and Export Corporation, Ltd., Nassau, Bahamas. RED RIDING HOOD, 726,826, by Gerard Brothers, Ltd., Nottingham. WISP-STICK, B730,487, by Beauty Counsellors, Inc., Michigan, U.S.A.

For soaps (3)

VIDOL, 729,468, by Fitzhugh & Carr, Nottingham. DHOW, 730,798, by Co-operative Wholesale Soc'ety, Ltd., Manchester.

For all goods (3)

PINJORA, 727,236, by Polak & Schwarz (England), Ltd., Enfield, Middlesex.

For de-greasing preparations (not for use in industrial and manufacturing processes) paint-removing compositions and rust removing preparations (3)

CORRITE, 729,256, by Grant & West, Ltd., London, N.7.

For cod-liver oil (5)

MAINSTAY, 713,044, by British Cod Liver Oils (Hull & Grimsby), Ltd., Hull, Yorks.

For pharmaceutical preparations, in tablet or capsule form, consisting of vitamins and minerals (5)

VITERRA, 724,489, by Chas. Pfizer & Co., Inc., Brooklyn, U.S.A.

For disinfectants (5)

VIDOL, 729,469, by Fitzhugh & Carr, Nottingham.

PRINT AND PUBLICITY

Advertising Campaigns

J. BIBBY & SONS, LTD., King Edward Street, Liverpool, 3: Araby soap. In *Daily Express*, *Daily Mirror*, *Daily Herald*, *Woman*, *Woman's Own*, *Woman's Weekly* and *Picturegoer*.

DALMAS, LTD., Leicester: Dalmas waterproof first-aid dressings. In *Picture Post*, *Illustrated*, *John Bull*, *Family Doctor*, *Woman*, *Woman's Own*, *Woman's Weekly*, *Woman and Home*, *Housewife*, *Nursery World*, *Wife and Home* and many other popular and women's magazines.

IMPERIAL CHEMICAL (PHARMACEUTICALS), LTD., Fulshaw Hall, Wilmslow, Manchester: Two exhibition caravans showing livestock remedies at the following agricultural shows:—Oakham, August 2 (Rutland County); Turiff, August 3; Ashby-de-la-Zouche, August 4; Perth, August 7 (Perthshire); Newcastle Emlyn, Carmarthens, August 7 (Tiviside); Blackpool, August 10-13 (Royal Lancs); Carmarthen, August 12-13 (United Counties); Haverfordwest, August 18-19 (Pembrokeshire); Allendale, August 21; Monmouth, August 26 (Monmouthshire).

SCOTT & BOWNE, LTD., 50 Upper Brook Street, London, W.1: Sans Egal lipstick: In *Woman*, *Everywoman*, *Woman and Beauty*, *Woman's Own*, *Good Taste*, *Woman and Home*, *Modern Woman*, *Vanity Fair*, *Woman's Journal*, *Bel-*

fast Telegraph, *Glasgow Bulletin* and on *Radio Luxembourg*.

SOUPLEX, LTD., Morecambe, Lancs: Nymph ladies' safety razor. National full-colour advertising.

Booklets and Leaflets

JOSEPH CROSSFIELD & SONS, LTD., Warrington, Lancs: Cleaning in the Food Industry, Nos. 1-4: Baking; Canning and Deep Freeze; Meat and Fish Products; Sugar Confectionery and Preserves. (21-p. booklets.)

GOOD HOUSEKEEPING INSTITUTE, 28-30 Grosvenor Gardens, London, S.W.1: "The Good Housekeeping Institute" (descriptive booklet), Pp. 20.

H.M. STATIONERY OFFICE, York House, Kingsway, London, W.C.2: In "choice of careers" series: "The Medical Laboratory Technician," "The Occupational Therapist." Pp. 16. Price 6d. each. In "notes on applied science" series: "Volumetric Glassware, Scientific Aspects of Design and Accuracy." Pp. 22. Price 1s. 6d.

NEW HYGIENE, LTD., 266 Holloway Road, London, N.7: "Scentinel Nos. 1, 3 and 4 Air Conditioning Boxes," "Air-o-gena," "Quiff," "Wham," "Rose-Petal Handkerchief Tissues" (2-p. leaflets).

COMING EVENTS

Wednesday, August 4

MANCHESTER PHARMACEUTICAL GOLFING SOCIETY, Mere golf club, Mere, Ches. Competition for the Woolley trophy (ladies' day).

Thursday, August 5

NORTH STAFFORDSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Stoke station, 7.32 a.m., Crewe, 7.50 a.m. Visit to Kodak, Ltd., Harrow, Middlesex.

C. & D. WEEKLY LIST OF PRICE CHANGES

A=Advanced; R=Reduced; I.R.P.=Inclusive Retail Price; *Tax 25 per cent.; †Tax 75 per cent.

CELLUCOTTON PRODUCTS, LTD.

	Doz.	I.R.P.
Kotex (12)	18 2	2 0 R

ELI LILLY & CO., LTD.

Pectocel*	16 oz.	9 4 A
	80 oz.	37 4 A

Now taxed like 4-oz. size.

FASSETT & JOHNSON, LTD. (from August 3)

Anzora cream†	small	13 4	2 6 A
	large	21 6	4 0 A
Anzora Viola†	small	13 4	2 6 A
	large	21 6	4 0 A
Nuzora†	13 4	2 6 A	
Anzora brillianlines†	13 4	2 6 A	
After-shave lotion†	13 4	2 6 A	

MEDO-CHEMICALS, LTD. (from August 1)

Amphamed, or Dexamed tablets, 25	1 9 R
100	5 0 R
250	11 6 R
500	21 0 R
1,000	37 6 R
Dexobarb tablets, 25	2 9 R
100	9 0 R
250	19 6 R
500	37 6 R

PAINES & BYRNE, LTD.

	Each	I.R.P.
Ascorbic acid tablets, B.P., 5 mgm., 1,000	5 3	7 11 R
25 mgm., 1,000	12 0	18 0 R
Aneurine hydrochloride tablets, B.P., 1 mgm., 1,000	10 6	15 9 R
10 mgm., 1,000	30 6	45 9 R
50 mgm., 1,000	124 0	186 0 R
100 mgm., 1,000	218 0	327 0 R
Nicotinic acid tablets, B.P., 50 mgm., 1,000	12 0	18 0 R
100 mgm., 1,000	23 0	34 6 R

SELTO (EASTBOURNE), LTD. (from August 1)

	Doz.
Selto dental salt* moulding	21 6
aluminium pack	11 8
refill	13 8
Selto soluble* bottle	10 5
	18 10
Selto denture powder* tin	9 9

Selto toothpaste* bottle	13 8
	18 0

1 9 R
2 3 R

NEW PRODUCTS AND PACKS

EVANS MEDICAL SUPPLIES, LTD.

Emolan cream†	15 0	2 10
---------------	------	------

GENATOSAN, LTD.

Braxy and blackleg vaccine, A.P.A., 50 c.c. bottle	11 0
100 c.c.	20 0
250 c.c.	45 0
C. pyogenes toxoid	
50 c.c. bottle	6 6
100 c.c.	12 0

GROSSMITH, LTD.

White Fire perfume	5 0
bouquet	9 6
soap (three)	5 0
bath cubes (six)	2 11
dusting powder	6 9

INNOXA, LTD.

Paris Mist skin perfume	7 6
talcum powder	4 6
soap	1 11

Gift coffrets containing:

two tablets soap and skin perfume	11 4
two tablets soap and talcum powder	8 4

KODAK, Ltd.

Flashholder model two	27 11
Camera Kodak Junior I	115 11
Kodak Junior II	166 11

NYLO-PUFF, LTD.

	Doz.
Nylon compact puff	
2-in. fluffy	3 6
2½-in.	4 9
2-in. velvet	3 3
2½-in.	4 6

S. WEST, LTD.

Cremalgin balm (rubefacient)	
16 oz.	19 6

P.A.T.A. PROTECTED LIST

ADDITION TO PROTECTED LIST

AYRTON, SAUNDERS & CO., LTD.	
Tabasan*	9 0
	1 6

You'll be busy with

BRONTAN

REGD. TRADE MARK

SUN-TAN CREAM

THIS SUMMER



NON-GREASY BRONTAN tans fast and sells fast, and each tube will show YOU a healthy profit. Now's the time to order for your share of this brisk business which will be continual throughout the summer.

Trade Price 10/3 per dozen
(P. Tax 7/8½)

Retail 2/- per tube
(inc. Tax)

Bonus for display, 13 to the dozen on parcels of not less than 3 dozen

JOHN BELL, HILLS & LUCAS LTD., OXFORD WORKS, WORSLEY BRIDGE RD., S.E.26

Pattinson's REGISTERED BRAND PRODUCTS

- LIGHT & HEAVY MAGNESIUM CARBONATES B.P.
- LIGHT & HEAVY MAGNESIUM OXIDES B.P.
- MAGNESIUM OXIDE LEVISSIMA
- MAGNESIUM HYDROXIDE B.P.C.
- MAGNESIUM TRISILICATE B.P.
- CREAM OF MAGNESIA B.P.

Our Research Division welcomes enquiries from any manufacturer with a problem in which any of the above products are concerned. Please write to our Sales Technical Department if you require fuller information.

for the
PHARMACEUTICAL
Industry

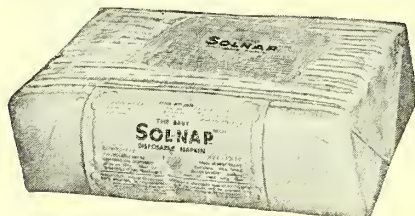
THE WASHINGTON CHEMICAL CO. LTD.

A member of the TURNER & NEWALL ORGANISATION
WASHINGTON · CO. DURHAM · ENGLAND

ENSURE
PROFITABLE HOLIDAY SALES
by Displaying NEAR YOUR SCALES

THE BABY
SOLNAP REGD
UBLE PY

GAUZE COVERED DISPOSABLE NAPKIN. Made of soft absorbent cellulose and blue waterproof sheet.



IDEAL when SHOPPING, VISITING and TRAVELLING
Packets of 24—31/6 per dozen Retail 3/6 per packet
Packets of 12—18/6 per dozen Retail 2/0 per packet
Packets of 6—11/3 per dozen Retail 1/3 per packet

A profitable line when displayed near your baby scales in conjunction with our 'SOLNAP' Cot sheets, Panties, Sleeved feeders and Nursery aprons.

M. MERICA & CO., LIMITED
QUEENS MILL, 20 SHAW RD., OLDHAM, LANCs.
Telephone: MAIN 5803 Telegrams: Merica Oldham



EUCALYPTUS OIL

70/75% B.P.

80/85% B.P.

Double Distilled Water White

GALE & MOUNT LTD

37 ROTHSCHILD ROAD, LONDON, W.4
Telephone: CH1swick 6628/9 Telegrams: Salmenta, Chisk, London

For acidosis...
recommend

Rayner's
Lembar

all the year
hot or cold



Lemons
Glucose
Scotch Barley
Sugar

MADE BY RAYNER AND COMPANY LIMITED, LONDON, N.18

Dyanese
FADELESS
DYES

2½d. STOCKING (except Black) .. 20/- gross
4½d. COLD WATER, CURTAIN
and Black Stocking Dyes .. 32/- gross

Order Dyes and Shade Cards from our Agents
Gt. Britain: W. B. Cartwright Ltd., Rawdon, Leeds
N. Ireland: T. M. Mullan & Co., Ltd., 42 Victoria
Street, Belfast. Eire: May Roberts (Ireland) Ltd.,
Grand Canal Quay, Dublin, C.6.

One shilling & sevenpence PROFIT on each sale!



NERVONE REGD

The New Biochemic Tablet

Retail Price
5s. 8d.
22s. 7d.
Incl. P.T.

'NERVONE', CECIL HOUSE, HOLBORN VIADUCT, LONDON

BISKS BRING BUSINESS

REGD.

Yes, the public have realised that BISKS certainly do make it easy to lose unwanted fat. There is now no need for the discomfort of drastic dieting, exercises or drugs. Just eat BISKS and 'Square' meals. Your customers will thank you for making it so easy for them to slim.

If you have not yet got a stock of these biscuits, don't miss your chance of real business, stock up NOW. BISKS are being extensively advertised in selected morning and evening newspapers, and display material is available on request. BISKS retail at 4/6 and 8/6.



-SO STOCK UP NOW!

ANDOMIA PRODUCTS LTD

GRANT STREET

BRADFORD, 3



tablets —

*for gastritis and peptic ulcer,
both chronic and acute.*

Particularly indicated for the effective treatment of peptic ulcer cases of long standing and those refractory to other types of therapy; also for cases of post-operative relapse and recurrence.

PACKINGS

Trial size	..	..	..	40 tablets	..	..	Retail price including P.T.
Standard size	..	..	..	120	..	..	7/2d.
Full treatment size	..	..	..	640	..	..	20/7d.
Dispensing Packs	..	..	..	720	..	..	103/-d.
							P.T. exempt

Stocked by all principal wholesale houses.

F.A.I.R. LABORATORIES LTD.

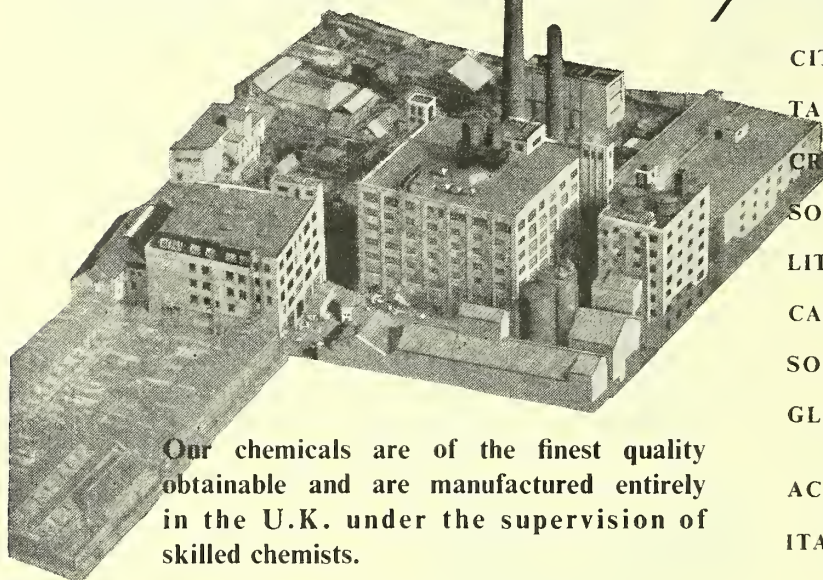
179 HEATH ROAD • TWICKENHAM • MIDDX

Phone: POPesgrove 2028.



Attractive display
material available
on request

Chemical Products of Distinction



Our chemicals are of the finest quality obtainable and are manufactured entirely in the U.K. under the supervision of skilled chemists.

CITRIC ACID
TARTARIC ACID
CREAM OF TARTAR
SODIUM POTASSIUM TARTRATE
LITHIUM SALTS
CALCIUM GLUCONATE
SODIUM GLUCONATE
GLUCONO DELTA LACTONE
(GLUCONIC ACID ANHYDRIDE)
ACID SODIUM CITRATE
ITACONIC ACID

KEMBALL, BISHOP & CO., LTD.

CROWN CHEMICAL WORKS THREE MILL LANE · BROMLEY-BY-BOW · LONDON · E.3

Telephone: ADVANCE 1234 (7 Lines)

ESTABLISHED 1870

Telegrams: KEMBALL BOCHURCH, LONDON.

an easy way to sell Vitamin C



“NIAGARA”
BLACKCURRANT SYRUP

ALSO SYRUP OF BLACKCURRANT B.P.C. · SYRUP OF
RASPBERRY B.P.C. · 6 to 1 CONCENTRATED RASPBERRY JUICE

BARNETT & FOSTER LIMITED

ALSO MANUFACTURERS OF “SUN-TANG” THE WHOLE ORANGE DRINK WITH ADDED GLUCOSE

Established in the Year 1858

“Niagara” Works, Eagle Wharf Road, London, N.1. Telephone: CLIssold 7132

There should be no QUERY..

Thirty years of scientific and engineering research and experience ensure a satisfactory answer to any sealing problem.

Why not let us help or advise you, whether by recommending the best closure for your product or designs for printed Metal Caps or Moulded Closures.

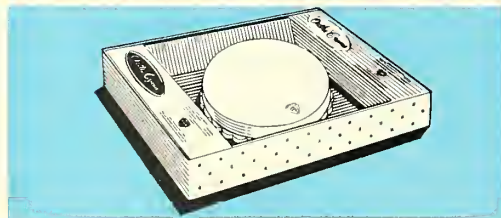
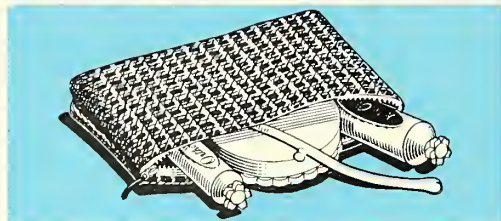
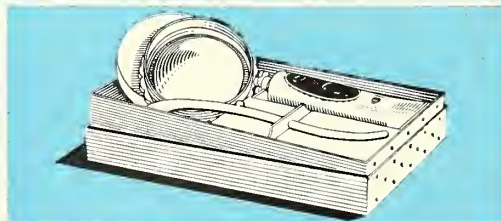


UGB

CLOSURE
DIVISION

UNITED GLASS BOTTLE MANUFACTURERS LTD

8 LEICESTER STREET, LONDON, W.C.2 - Telephone : GERRARD 8611 (18 LINES) Telegrams : UNGLABOMAN, LESQUARE, LONDON



the ethical name in contraception

Preceptin Vaginal Gel: contraceptive gel for use without a diaphragm.

Package A: 3 oz. tube, with Ortho Applicator.

Package B: 3 oz. tube.

Ortho-Gynol: contraceptive jelly.

Package A: 3 oz. tube, with Ortho Applicator.

Package B: 3 oz. tube.

Ortho-Creme: contraceptive cream.

Package A: 2½ oz. tube, with Ortho Applicator.

Package B: 2½ oz. tube.

Ortho-Gynol Set:

3 oz. tube of Ortho-Gynol

Ortho Diaphragm

Ortho Diaphragm Introducer } in sizes 55 to 95 (in 5 mm. gradations).

Ortho-Creme Set: as Ortho-Gynol Set with tube of Ortho-Creme instead of Ortho-Gynol in sizes 55 to 95 (in 5 mm. gradations).

Ortho De Luxe Kit: containing full size Ortho-Gynol, trial size Ortho-Creme, Ortho Diaphragm and Diaphragm Introducer in woven plastic zipper bag. Sizes 55 to 95 mm. (in 5 mm. gradations)

Ortho Diaphragm Duo-Pack: containing: Ortho Diaphragm in sizes 55 to 95 (in 5 mm. gradations). Trial size Ortho-Gynol.

Trial size Ortho-Creme.

Ortho Diaphragm: coil spring, sizes 55 to 95 (in 5 mm. gradations).

Ortho-White Diaphragm: flat spring, sizes 55 to 95 (in 5 mm. gradations). Each Ortho Diaphragm is packed in a permanent and beautiful plastic box.

Ortho Applicator: for vaginal application of measured dose (5 cc.) Ortho-Gynol, Ortho-Creme or Preceptin Vaginal Gel.

Ortho Diaphragm Introducer: individual introducers to accommodate diaphragms sizes 55 to 95 (in 5 mm. gradations).

Supplies through your usual wholesaler, please!



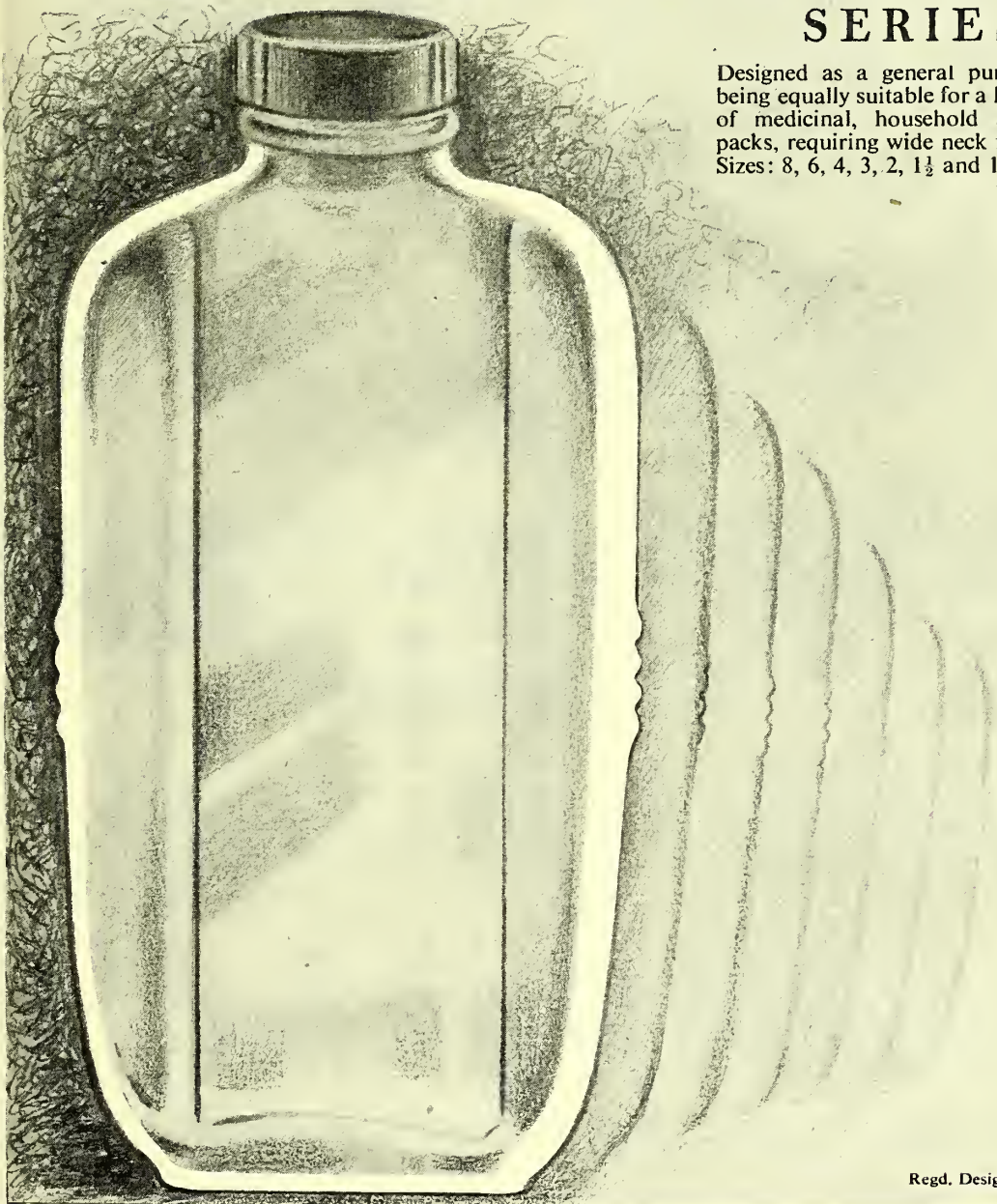
Ortho Pharmaceutical Limited

HIGH WYCOMBE · BUCKINGHAMSHIRE · ENGLAND

Makers of Gynaecic Pharmaceuticals

"HANDYLINE" SERIES

Designed as a general purpose line,
being equally suitable for a large range
of medicinal, household and toilet
packs, requiring wide neck finish.
Sizes: 8, 6, 4, 3, 2, 1½ and 1 oz.



Regd. Design No. 872094

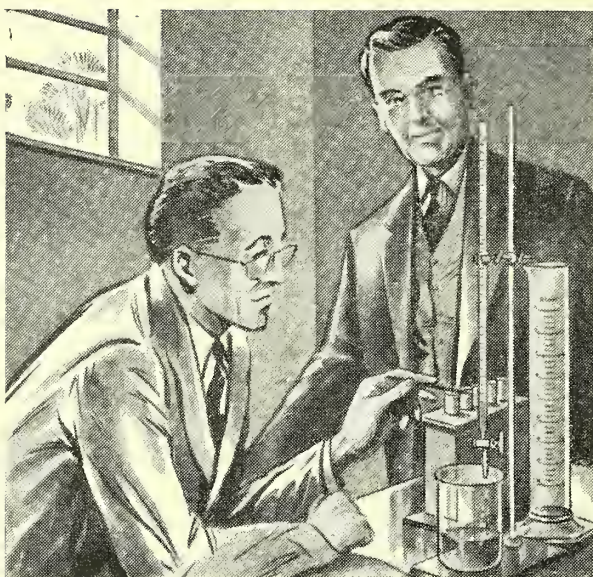
THE INTERNATIONAL BOTTLE CO LTD

PHONE
MAYFAIR 6992
(5 LINES)

140, PARK LANE, LONDON, W.1

GRAMS :
AUTREFOIS, AUDLEY
LONDON

Designers & manufacturers of high quality glassware



"Yes, I've checked these graduations most carefully....

"....I've never yet found the slightest inaccuracy in a 'PYREX' Glass graduated Burette, or in fact in any 'PYREX' graduated vessel."

"Our work is rather special, so we always use Works Class A standard, but I am sure we'd be quite safe in using Works Class B at the lower cost. Of course we keep NPL Class A for all our research work."

"What about breakages?"

"Very few, Sir! You see, 'PYREX' can be made so much more sturdy and robust because of its low coefficient of expansion (actually 3.2×10^{-6})—and we never have breakage through heat, nor any sign of chemical attack."

● 'PYREX' Brand Graduated Glassware is made only by James A. Jobling & Co. Ltd., Sunderland.

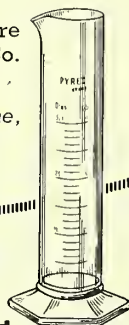
● Large new catalogue *FREE*. Send name, address, and position in firm.



**JAMES A. JOBLING
& CO., LTD.**

Wear Glass Works, Sunderland

The original and only makers of 'PYREX' Brand Glass in the United Kingdom.



Mitchell MIXERS



... for the
pre-emulsifying
of creams

and for mixing
medicines,



hand lotions and
calamine lotions



L. A. MITCHELL LTD., 37 PETER STREET, MANCHESTER 2

Telephone :
BLackfriars
7224 (4 lines)



MX 54

PUNCHES AND DIES

Whatever your needs,
get in touch with us.
We have helped others
— we can help you.

I. HOLLAND LTD. ENGINEERS
128 WATERWAY STREET · NOTTINGHAM

Telephone: 88103

TONGUE DEPRESSORS

★ **LOWEST PRICES SINCE THE WAR**

IMPORTED—PRE-WAR QUALITY

Size 6 in. x $\frac{3}{4}$ in. x 2 mm. thick. Danish beech, perfectly finished.
Boxed 100's. Minimum order 10,000.

Annual contracts may be spread over a year, entitling buyers to reduced prices, and deliveries as required. Write for details.

● **APPLICATORS,** First-quality hard-wood applicators, packed in cartons of 6 gross.

● Wholesale Houses only supplied.

ASHWOOD TIMBER INDUSTRIES LTD.

Specialists in Veneer and Plywood Products for all Trades.

IBEX HOUSE, MINORIES, LONDON, E.C.3
Tel.: ROYal 2494 Cables: ASHTIM, LONDON

Eye Appeal...

Is easily applied to
YOUR PRODUCTS, with
DISTINCTIVE LABELS

from

SUTTLEY & SILVERLOCK

(Branch of Kelly's Directories Ltd.)

ANDOVER

Hants

LABELS • CARTONS • PRINTED STATIONERY

WATERHOUSE

FOR SHOP EQUIPMENT

Makers of Fine Shop Fittings

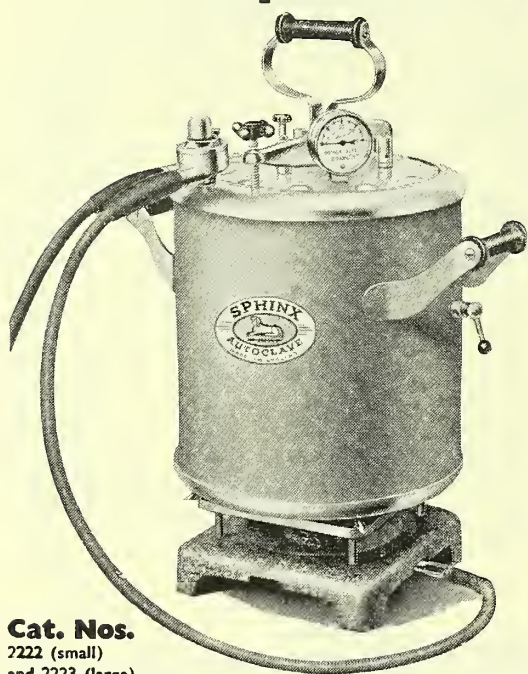
SOLE DISTRIBUTORS :

SHOPFITTERS (LANCASHIRE) LTD

BULL BRIDGE - ACCRINGTON - LANCASHIRE

Telephone : Accrington 4238-9

The Sphinx STAINLESS STEEL AUTOCLAVE



Cat. Nos.
2222 (small)
and 2223 (large)

at a reasonable price!

GAS OPERATED — THERMOSTATICALLY CONTROLLED

Made in 2 sizes :

11" x 10½" for sterilising
ampoules and bottles of in-
jectible fluids.

18" x 10½" for sterilising
pipettes, syringes, etc.

**MAXIMUM WORKING
PRESSURE**

20 lbs. per sq. inch.

Accessories Available :

- 1 Friedman-Athill type gas burner, and Compoflex tubing.
- 2 Stainless steel wire baskets.
- 3 Copper sheathed thermometer graduated 210/300° F.
- 4 Two stainless steel semi-circular half plates for use when sterilising bottles.

*Approved by the Technical Committee
of Joint Insurance Companies*

*A fully descriptive leaflet and price
list will be sent post free on request*



JOSEPH SANKEY & SONS LTD · ALBERT ST · BILSTON · STAFFS

JS * SS

BRANNAN GUARANTEED THERMOMETERS

CLINICAL - HOUSEHOLD - INDUSTRIAL
When ordering Thermometers, Insist upon
Brannans — made by highly skilled workers at
Britain's most modern Thermometer Factory.

S. Brannan & Sons Ltd.

Clinitherm Works,
Dalmain Road, Forest Hill,
London, S.E.23

Telephone: Forest Hill 3414 P. Ex.

Northern Factory:

Cleator Moor
West Cumberland
Tel.: Cleator Moor 310



MODERN EQUIPMENT



"WEBSTER'S"
STAINLESS STEELWARE

ISAAC WEBSTER & SONS LTD.
ABBAY WORKS

TELEPHONE
51580
LEEDS

**KIRKSTALL
LEEDS. 5.**

TELEGRAMS
"ISAAC WEBSTER"
KIRKSTALL

STANDARD ROUND BOXES FOR THE CHEMIST—

"LITTLE JOHN"
DRUMS

— by
ROBINSONS
of
CHESTERFIELD
of course

PILL
BOXES

CHEPETTE &
SEALITE
OINTMENT
BOXES



ALL AVAILABLE FROM STOCK THROUGH YOUR USUAL SUPPLIER
ROBINSON & SONS LTD WHEATBRIDGE MILLS, CHESTERFIELD

Telegrams: 'BOXES' CHESTERFIELD

Telephone: 2105 (6 lines)

and
KING'S BOURNE HOUSE, 229-231 HIGH HOLBORN, W.C.1

Telegrams: OMNIBOX HOLB. LONDON Telephone: HOLborn 6383

"The Sign of a



Good Bottle"



The BEATSON MEDICAL

A bottle of quality. The retention of the vial lip for easy pouring is combined with all the advantages of modern design, including the elimination of internal sharp corners allowing rapid dispersal of sediment.

- ★ Plain or Graduated
- ★ Cork Mouth or Screw Capped

BEATSON, CLARK & CO. LTD
GLASS BOTTLE MANUFACTURERS
ROTHERHAM • Established 1751 • YORKS.

BC.68

STANDARD SYNTHETICS LIMITED

Distillers of ESSENTIAL OILS since 1923

*Manufacturers of AROMATICS, PERFUME
BASES AND FLAVOURS.*

*We specialise in CINNAMON BARK OIL,
JUNIPER BERRY OIL,
WINTERGREEN OIL,
FRENCH LAVENDER OIL,
TERPENELESS LEMON OIL,
PEPPERMINT OILS, PERFUME
BASES, ETC.*

**76 GLENTHAM RD., BARNES
LONDON - S.W.13**

Telephone: RIVerside 3616

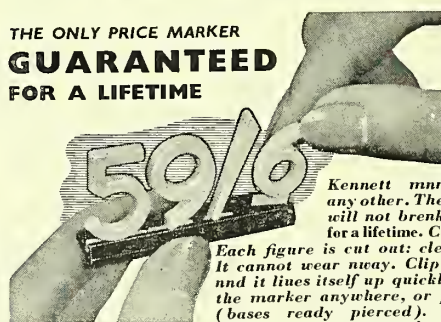
Managing Director:
JOHN LESLIE HINDLE, B.Sc.

**GUM TRAGACANTH
GUM KARAYA**
WHOLE AND POWDERED
DIRECT IMPORTERS

Phone.
MANSON
HOUSE
4405
(3lines)

M. HAMBURGER & SONS LTD
Plantation House
MINCING LANE • LONDON E.C.3

THE ONLY PRICE MARKER
**GUARANTEED
FOR A LIFETIME**



Size: 1/2" high
Sets from 44/-

★
ALPHABET
SETS TO
MATCH

Stamp on a
Kennett marker. Stamp on
any other. The Kennett marker
will not break. It is guaranteed
for a lifetime. Compare its looks.

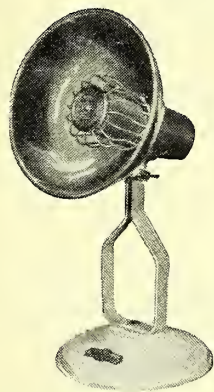
Each figure is cut out: clear, shiny white.
It cannot wear away. Clip it into the base
and it lines itself up quickly, firmly. Stand
the marker anywhere, or pin to material,
(bases ready pierced). You get more
pieces per set, more value for money with
Kennett markers. Only Kennett provides
thousands of prices guaranteed for a lifetime.

Send for
FREE SAMPLES

KENNETT PRICE MARKERS
55 Eastgate Street • Winchester • Hants.

SOL-TAN

Relief from Pain !



'SOL-TAN'

Cat. No. E.M. 39 P.

This attractively finished model is finished in Ivory and Eau-de-Nil. Reflector dia. 9½". Height 16". Burner No. 2 L.W. 250 Watt or No. 2 M.W. 400 Watt. Supplied complete with Treatment Instructions.

List Price

£3.10.0 Tax Free
Spare Burners 13/9 each

Cat. No. EM40P Fitted with 7½" Diameter Reflector specially designed for Local Application. List Price £3.2.6 Tax Free.

Sunshine at Will !

'SOL-TAN' 'EMPIRE'

ARTIFICIAL SUN-LAMP

Cat. No. 100/TM

High Quality, powerful Quartz Mercury Vapour Burner. Outstanding value. Supplied complete with eyeshields and instructions. Voltages: 200/210, 220/230 and 240/250.

List Price

£16.10.0 Complete
Tax Free



Only supplied against Doctor's certificate or for professional use

Fully illustrated Catalogue gladly sent on request. 'Sol-Tan' Marketed for Home and Export by:—

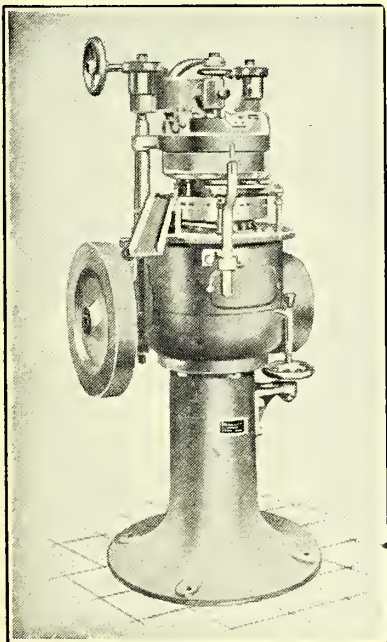
THE LONDON COMMERCIAL ELECTRICAL STORES LTD
20-23 CURSITOR STREET, E.C.4. • CHANCERY 6488/9

ROTARY and SINGLE PUNCH TABLETTING MACHINES

OINTMENT MIXING and GRINDING MILLS

PUNCHES AND DIES FOR ALL TYPES OF TABLETTING MACHINES

Presses and Moulds for
Gelatine Capsules



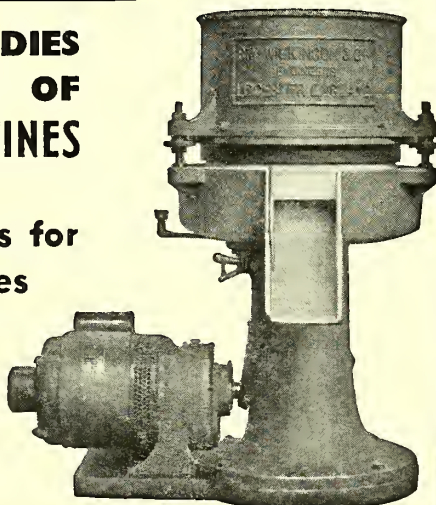
S. W. WILKINSON & CO., LTD.

WESTERN ROAD, LEICESTER

Telephone: Leicester 21283.

Telegrams: Wilkinson, Leicester 21283

Engineers and Specialists in Pharmaceutical Machinery for over 45 years.



*A small firm with a
BIG reputation for:—*

CRUDE DRUGS

BOTANICALS	GUMS
BALSAMS	SPICES
CULINARY HERBS	WAXES
ESSENTIAL OILS	RAUWOLFIA

BROME & SCHIMMER

Importers & Millers

7 LEATHER MARKET, LONDON,
S.E.1

MORE SALES—MORE PROFIT

*Your wholesaler can
supply you promptly with*

BESORBBON

(REGD. TRADE MARK)

MEDICINAL SNUFF

for colds and catarrh

but always order at least one dozen
and so secure the attractive and
convenient counter display box
which, on show, will increase your
sales.

MORE SALES — MORE PROFIT

KEMSALES LTD., 20 EASTCHEAP, LONDON, E.C.3

There's lots and lots of Rheumatism about!

And plenty of demand for the most reliable
general remedy of all—Curicones.

With its present up-to-date formula, it is a
remedy you can recommend to all your
Rheumatic customers.

This time of year a small counter show of
Curicones will bring quite a nice extra trade,
while obviously no chemist should ever let
himself run out of stock of the 5/4, 13/4 or
25/6 size.

We still have small supplies left of our novel
"weather indicator" showcard. It is most
effective and surprisingly accurate. Send us

CURICONES your name
and address
for one and
see the inter-
est it attracts.



AND

PATA

STEPHEN MATTHEWS & CO., LTD.

19/21 Farringdon Street, London, E.C.4

The Silky Soft Absorbent Tissue that is preferred

Vanity

HANKIE TISSUES
RETAILS FROM 1/6d.



4d.

POCKET PACK

or Travel, School, etc. (24
large size White Tissues)
In the carton that does not
disintegrate in use.

BOUDOIR CARTONS

(150 in White or assorted
Pastel colours) or Cellophane
Wrapped 150 and 180;
assorted shades if required.

FREEDER BROTHERS PAPER MILLS
BRIMSDOWN, ENFIELD, MIDDLESEX
Telephone: Howard 1847 (3 lines) Telegrams: Sylkocrepe, Enfield, Middlesex

We manufacture in bulk

**RAUWOLFIA SERPENTINA
TOTAL ALKALOIDS
including RESERPINE**

For Prompt air shipment

***contact* MEHTA BROTHERS**

P.O. Box No. 35 AMRITSAR (INDIA) Telegrams: VIRINDER AMRITSAR. Telephones: 311/10 & 777

DISEASES AND REMEDIES

Ninth Edition

Completely Rewritten

- First published in 1898. Previous editions have made their major appeal to retail pharmacists, assisting them in counter prescribing.
- Today, such an orientation would be misplaced and uninformative, since the medicaments used in treating many diseases may be used only under medical supervision.
- The policy adopted has been to provide pharmacists, whatever branch of the calling they follow, with a text-book of information concerning the treatment of diseases and the drugs used.
- Accepted methods of treatment are explained, and the medicaments mentioned include some that have been introduced only within the last twelve months.

Price **15/-** (postage 4d.)

The

CHEMIST AND DRUGGIST

28 ESSEX STREET, STRAND, LONDON, W.C.2.



By Appointment to the late
King George VI

MAKING
A PROFIT
IS A
PICNIC
all the
year
round ...



... with
the NEW
EASY POURING
FLASKS!

First again, Thermos presents the
vacuum flask with the easy pouring lip.
Just look at its revolutionary advantages.

- Perfect pouring.
- Snug neck seal.
- Added protection.
- NO INCREASE IN PRICES.

THERMOS

REGISTERED TRADE MARK

Stocked by wholesalers throughout the country

All Thermos Brand vacuum
flask models have the new
pouler lip. Order right away
to reap the benefits of the de-
mand created by this new fea-
ture and fostered by National
Advertising.

For that
**EXTRA
ENERGY**
So Vital
FOR SUCCESS



Simpkins

USED BY
LEADING
COMPETITORS
IN EVERY SPORT

In 4 delicious flavours



THE ORIGINAL
GLUCOSE TABLETS

10^g
PKT.

A. L. SIMPKIN, & CO. LTD., SHEFFIELD. 6

Manufacturers of Glucose Barley Sugar Confectionery and Glucose Medications

To introduce

NURSE HARVEY'S BABY POWDER

the powder containing pure

OLIVE OIL

we are embarking on a strong campaign in the women's
magazines, reaching over eight million readers

EVERY MOTHER
IN THE COUNTRY
WILL KNOW ABOUT THIS
**OLIVE OIL BABY
POWDER!**

through the farth-
coming continuous
advertising.

BE READY TO SATISFY
THE GROWING DEMAND
FOR THIS EXCELLENT
LINE. SOMETHING NEW
IN TOILET POWDERS.

Generous trade terms and attractive
display material available from —

O. Scruton & Co. Ltd., York

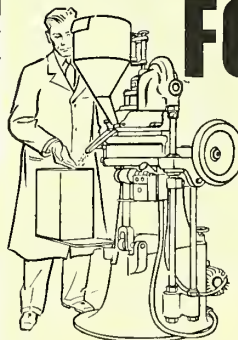


MADE BY THE MAKERS OF THE FAMOUS NURSE HARVEY'S MIXTURE



THE PEOPLE FOR—

**PRIVATE
FORMULA**



Preparation
and production
of tablets, pills
capsules, lozenges
suppositories
ointments

MATTHEWS & WILSON LTD.
6-8 COLE STREET, LONDON, S.E.1.

Telephone: HOP 2147-8

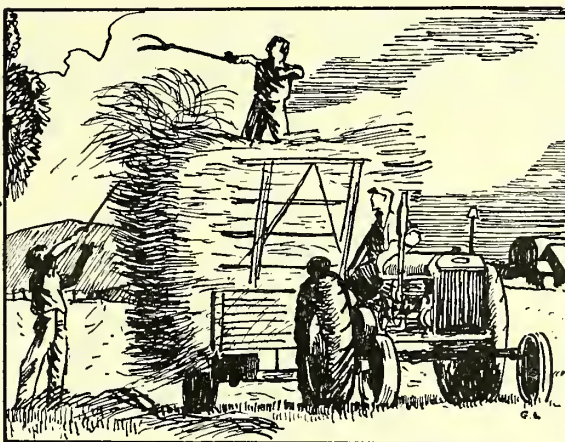
Specialists for over 60 years

B.P., B.P.C., N.F., and all Standard preparations
supplied from stock.

MAKE HAY WHILE THE SUN SHINES!

BY SELLING

ADAPTOPLAST



Now is your opportunity to earn extra profit and goodwill by selling "ADAPTOPLAST" the ONLY C.F. First Aid Dressing of this type.

We are offering a special 5% EXTRA DISCOUNT until the end of August on ALL orders for "ADAPTOPLAST" First Aid Dressings, in return for a fortnight's display.

The 9d. and 1/6d. tins are packed in eye-catching display outers and your display of these will be backed by NATIONAL ADVERTISING to the extent of 27 MILLION appearances per month during the peak summer sales season.

DISTRIBUTED THROUGH CHEMISTS ONLY

A PRODUCT OF *Cuxson Gerrard & Co. Ltd.* OLDBURY, BIRMINGHAM

Buckley Bowker Tablet Co.

Specialise in the manufacture
of **Quality Tablets** of every
kind, and of **Contraceptive
Foam Tablets** of the highest
standard.

Quotations gladly submitted.

LIMITED EST. 30 YEARS
29 PARKFIELD STREET ·
LONDON · N · 1 · Telephone Canonbury 340



BOOKLET "BUYING SHARES OUT OF EARNINGS"

Become a shareholder in Britain's prosperous industries for as little as £5 down. This booklet explains how. Sent post free. Write to:

Investment Service Dept. X

WHITEHEAD INDUSTRIAL TRUST LIMITED

177 Regent Street, London, W.1

Licensed Dealers in Securities

Directors: A. J. Whitehead, J. D. Kyle, C.A.

Wimzo

ALWAYS MEANS
CLEAN HANDS

ASK YOUR WHOLESALER, OR WRITE:
WIMSOL LTD., KEIGHLEY, FOR TERMS

Now Available—A Modern Version of an Old Favourite

The Art of Dispensing

Completely re-written 1953

Price 21/- (postage 9d)

"The Art of Dispensing" is the most economical, complete and up-to-date manual dealing with the pharmacist's work at the dispensing counter. Explained in simple yet concise fashion, this book is a necessary part of the equipment of every dispensary. New ideas have been incorporated and scientific knowledge has been added to the art formerly based on skilful training during apprenticeship and from experience gained in pharmacies of international repute.

Order from your Bookseller or direct from The Publisher;

The CHEMIST AND DRUGGIST

28 ESSEX STREET · STRAND · LONDON · W.C.2

"ROADMASTER" NIGHTDRIVING GLASSES

—the new accessory that
every Motorist wants!

Manufacturers: **FISH OPTICAL CO. LTD.** ★

McNeish House, 261 HARROW ROAD, LONDON, W.2

Tel.: CUNNINGHAM 8318 & 8267

★ Makers of the world-famous 'SUNGARD' Sunglasses

IMPORTANT!

KOTEX^{*}

PRICE REDUCTION!

NOW

2/-

Price reduction effective from
August 1st, 1954.
Your new price . . . 18/2 per dozen
boxes of 12 towels.
(48 boxes to each container.)
ORDER FROM YOUR WHOLESALE TODAY !

~~WAS 2/3~~



Also available in convenient narrow box. (5 towels with loops.) This price remains unchanged.

REMEMBER the striking green wrappers — ideal for display — removable, easy to serve !

CELLUCOTTON PRODUCTS LTD., LONDON

*Reg. T.M.


The
CHEMIST AND DRUGGIST
CLASSIFIED ADVERTISEMENTS
 Supplement

28 ESSEX STREET, STRAND, LONDON, W.C.2

ORRIDGE & COMPANY

184 STRAND, W.C.2

Tel.: TEMple Bar 9212/3 & 6340

CHEMIST BUSINESS TRANSFER AGENTS AND VALUERS WHOLESALE AND RETAIL

BRANCHES: BIRMINGHAM · SOUTHAMPTON · LIVERPOOL · SHEFFIELD · CARDIFF

Irish Representative: Mr. J. A. Bassett, Ph.C., 57 Great Victoria Street, Belfast, Northern Ireland. Tel.: Belfast 27078

BUSINESSES WANTED

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

DRUG STORE WANTED in Midlands or South town with three-bedroom accommodation. Turnover £5,000 upwards, or would join chemist as unqualified member of business. Box C 1569.

PREMISES FOR SALE

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

TABLET MANUFACTURING concern for sale, modern plant, quick disposal. Principals only in strict confidence. Box C 1576.

PREMISES

HOCKLEY, ESSEX, 8 MILES SOUTHEAST-ON-SEA, ONE HOUR TRAVELLING TIME LIVERPOOL STREET. To let, ultra modern double-fronted lock-up shop in rapidly developing area, £6 per week inclusive. Long lease. Reserved for high-class chemist. Immediate possession, trade assured by large number of new private dwellings already occupied. Apply A. W. Deavin & Co., Ltd., 34 Spa Road, Hockley, Essex. Telephone Hockley 400/1. C 1519

APPOINTMENTS

18/- per half-inch (min.) and pro rata.
Box 2/-

CRUMPSALL HOSPITAL, MANCHESTER, 8

Pharmacists

required in the above General Hospital. Salary on Whitley Council Scale. Applications, with particulars to the Hospital Administrator. C 7351

HOSPITAL MANAGEMENT COMMITTEE FOR ST. FRANCIS AND THE LADY CHICHESTER HOSPITALS, ST. FRANCIS HOSPITAL, HAYWARDS HEATH

Pharmacist

required immediately. Salary (Locum) £14 14s. per week. Apply in writing to the Secretary. C 7359

KENT AND CANTERBURY HOSPITAL, CANTERBURY. GROUP PHARMACEUTICAL DEPARTMENT

Senior Pharmacist

required for the Group Pharmaceutical Department, at the Kent and Canterbury Hospital, Canterbury. This post offers excellent experience in all branches of pharmacy. The department services the Canterbury Group, comprising twelve hospitals with a total of approximately 1,000 beds. Salary (Category III hospital) £525 x £25(4)—£625. Higher qualification allowance payable as appropriate. Applications, with full details and copies of three recent testimonials, to be forwarded within ten days of the appearance of this advertisement to the Group Secretary, Canterbury Group Hospital Management Committee, Central Office, Nunnery Fields Hospital, Canterbury. C 7381

NORTH WEST DURHAM HOSPITAL MANAGEMENT COMMITTEE

Senior Pharmacist
(resident or non-resident)

Applications are invited for the above-noted vacancy at the SHOTLEY BRIDGE GENERAL HOSPITAL (557 beds). Appointment offers a thorough experience in all branches of hospital pharmacy. Applicant would be responsible for the manufacture of sterile preparations. Salary and conditions of service according to the Pharmaceutical Whitley Council decisions. Applications, stating age, qualifications and experience, together with names of two referees should be sent to the Secretary, Shotley Bridge General Hospital, Shotley Bridge, Consett, co. Durham. C 7349

NOTTINGHAM No. 1 HOSPITAL MANAGEMENT COMMITTEE

Senior Pharmacist (Female) and Pharmacist

Applications are invited for the appointment of Senior Pharmacist (female) at the GENERAL HOSPITAL, NOTTINGHAM, to commence duties as soon as possible. Salary: £525 x £25—£625 per annum plus extra qualification allowance where applicable. Applications are also invited for the appointment of Pharmacist at the HIGHBURY AND HEATHFIELD HOSPITALS, NOTTINGHAM, to commence duties as soon as possible. Salary: £450 x £25—£575 per annum plus extra qualification allowance where applicable. Salary and conditions of service in accordance with the Pharmaceutical Whitley Council Regulations. Applications for these posts stating age, qualifications and experience together with the names of two referees to be sent as soon as possible to the Group Secretary, General Hospital, Nottingham. C 194

PRESTWICH (MENTAL) HOSPITAL

Senior Pharmacist

required at Prestwich (Mental) Hospital. Applications should be sent to the Secretary, Prestwich Hospital, Prestwich, nr. Manchester, not later than Saturday, August 14, 1954. C 7348

PRISON COMMISSION

Pharmacists

(Chief Pharmacist, Category D). Applications from men are invited for two appointments in the Prison and Borstal Service, at H.M. Prisons, Pentonville, London; and Leeds. Applicants who should be not less than 25 years of age, must be registered Pharmacists. Salary: £575 x £25—£675. Starting point according to age, experience and qualifications. The London post carries a £30 addition. An allowance of £25 payable in addition to holders of a recognised higher qualification. Regulations and application forms, from the Establishment Officer (51/7/9), Prison Commission, Room 246, Horseferry House, Dean Ryle Street, London, S.W.1, to be returned by August 21, 1954. C 7352

SCUNTHORPE HOSPITAL MANAGEMENT COMMITTEE

Locum Pharmacist

Immediate vacancy for Locum Pharmacist, £15 15s. per week, non-resident, but assistance given to female applicants to find accommodation. Applications, stating period available and naming two referees, to Group Secretary, War Memorial Hospital, Scunthorpe. C 7350

ROYAL FREE HOSPITAL GROUP, HAMPSTEAD GENERAL HOSPITAL,

HAVERSTOCK HILL, N.W.3

Locum Pharmacist

required, commencing on August 3. Salary £14 14s. per week. Applications, together with the names of two referees, should be addressed to Group Chief Pharmacist, Royal Free Hospital, Gray's Inn Road, W.C.1. C 7368

SCUNTHORPE HOSPITAL MANAGEMENT COMMITTEE

Chief Pharmacist

Vacancy for Chief Pharmacist to group of four hospitals with central Pharmaceutical Department, Category III, salary range £680 x £25 to £780. Non-resident but assistance given to female applicants in finding residential accommodation. Applications, naming two referees to Secretary, War Memorial Hospital, Scunthorpe, Lincs. C 7334

ST. BARTHOLOMEW'S HOSPITAL, LONDON, E.C.1

Pharmacists

Two vacancies exist. Salary in accordance with the Whitley Council Scale. Write, enclosing two copies of testimonials to the Pharmacist. C 7345

ST. LUKE'S HOSPITAL, BRADFORD

953 Beds

Deputy Pharmacist

Applications are invited for the post of Deputy Pharmacist from October 1 next. Experience of manufacturing desirable. Salary: £625 x £25—£725 p.a. Applications stating age, particulars of training, qualifications and experience with the names of two referees to the Secretary, Royal Infirmary, Bradford. C 7353

THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET, LONDON, W.C.1

Pharmacist

Applications are invited for the post of pharmacist at this hospital. Salary within the Pharmaceutical Whitley Council Scale (£450 x £25—£525) plus London Weighting, £25 for recognised higher qualification. Apply by letter to Chief Pharmacist. C 166

THE LONDON HOSPITAL, WHITECHAPEL, LONDON, E.1

Pharmacist

Applicants must be registered Pharmacists. Salary scale £450 (age 23) x £25 to £575 plus London Weighting according to previous experience and service. Dining-room facilities available. Write Secretary. C 179

THE UNITED NEWCASTLE UPON TYNE HOSPITALS

Pharmacist

Applications are invited for the post of pharmacist (male or female) at the Royal Victoria Infirmary. Conditions of service in accordance with the recommendations of the appropriate Whitley Council. Applications stating age, qualifications and experience, and giving the names of two referees, should be sent to the House Governor and Secretary, Royal Victoria Infirmary, Queen Victoria Road, G.P.O. Box No. 141, Newcastle upon Tyne. C 7366

BERDOE & FISH

Chemists' Transfer Agents and Valuers
41 ARGYLE SQUARE, KING'S CROSS, W.C.1
 (opposite St. Pancras and King's Cross Stations)

Wanted immediately good class businesses in London, Home Counties and South Coast. Private clients waiting with cash up to £10,000.

● All Valuations and Stocktakings, carried out under personal supervision of principals.
 Established 1870 Phone: TERminus 3574

'UNISEC' from the Single Unit to the Complete Pharmacy
 WRITE FOR YOUR COPY OF THE STANDARD REFERENCE OF PHARMACY FITTING

MYERS of OLD ST.
 133/5 & 141/7 OLD STREET, LONDON, E.C.1

Appointments—Continued

THE MILLER GENERAL AND ST. ALFEGE'S HOSPITALS, GREENWICH, LONDON, S.E.10
Assistant in Dispensing

Permanent or locum required at each of the above hospitals. Whitley Council rate and conditions. Apply Chief Pharmacists, Tel.: Tid. 1136 and Gre. 2655 respectively. C 7332

WOOLWICH GROUP HOSPITAL MANAGEMENT COMMITTEE
Senior Pharmacists or Pharmacist

Applications are invited for the following appointments:

Senior Pharmacist,
Brook General Hospital, Woolwich

This is an expanding hospital of 470 beds and includes S.E. Regional Centres for Neuro and Thoracic Surgery. Modern and well equipped pharmaceutical department catering for a wide variety of work. Applicants should be experienced in sterilisation technique and capable of taking charge of this section of the department.

Senior Pharmacist,
St. Nicholas Hospital, Plumstead

A busy general hospital of 345 beds and a large out-patient clinic. The work is varied and interesting, covering all branches of pharmacy.

Pharmacist,
Memorial Hospital, Woolwich

This pharmacy also deals with the requirements of a number of subsidiary hospitals and provides excellent experience. Candidates who have recently qualified are invited to apply. Applications for these posts, which may be resident if desired, to be sent to Group Secretary, Memorial Hospital, Woolwich, London, S.E.18. C 7319

YORK "A" AND TADCASTER HOSPITAL MANAGEMENT COMMITTEE

Senior Pharmacist and Locum Pharmacist
 required for the COUNTY HOSPITAL, YORK. Salary of the permanent appointment £525 x £25 to maximum £625 p.a., with £25 p.a. higher qualification allowance, e.g., for B.Pharm., A.R.I.C., Ph.C.; locum fee not less than £11 11s. per week. Applications giving age, qualifications, experience and names of two referees to the Secretary, Bootham Park, York. C 7355

SITUATIONS OPEN

8/6 for 36 words (min.) then 3d. per word.
 Box 2/-

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

RIKER LABORATORIES LIMITED

require experienced representatives, preferably pharmacists, for the following territories, to commence employment in September:—

Northern Scotland	Eastern Scotland
North Lancashire	North Midlands
	West Midlands

Riker representatives receive salary, bonus and expenses. A company car is provided and there is a pensions scheme. The positions offer the opportunity of joining a young and rapidly expanding company with a unique range of medical products. Apply in writing, giving an outline of experience to Managing Director, Morley Street, Loughborough, Leicestershire.

C 7176

ANALYTICAL CHEMIST

(Male or Female) for specialised Laboratory Work required by well-known company of Manufacturing Chemists in North of England. Full details of age, previous experience, present employment and salary required, should be given and will be treated in confidence. Position is pensionable. Box C 7369.

RETAIL (HOME)

ASSISTANT PHARMACIST required by Gammages of Holborn, for counter and dispensing duties. Good salary. Pension scheme. Hours 9 a.m. to 5 p.m. and 1 p.m. Saturdays. Apply, 101 Hatton Garden, E.C.1. C 7356

WE DON'T FIT round pegs in square holes, but we do try to fit our managers in suitable pharmacies where they will be happy and successful. In the early autumn we shall have one or two vacancies due to retirement and expansion in and around London. If you are a pharmacist looking for a permanency with a good superannuation scheme, have personality, enthusiasm, willing to take responsibility, and give and expect a fair deal then write to me. Give fullest details which will be treated in strictest confidence. All letters will be answered. Managing Director, Arnold M. Gee, Ltd., 12 High Street, Colliers Wood, S.W.19. C 1538

ASSISTANT WANTED. Good all round, for Devon market town. Flat over shop. All particulars including salary to Box C 1565.

CATFORD, S.E.6. Unqualified assistant required for dispensing and counter. Knowledge of photographic also window dressing an advantage. No Sunday or half-day duties. Full particulars of experience, salary required. Hull Chemists, 185 Torridge Road, Catford, S.E.6. C 1578

EALING. Excellent opportunity for energetic pharmacist to manage nicely fitted branch in pleasant suburban area. Generous salary and monthly bonus. Excellent self-contained flat available near to branch. Good supporting staff. Permanency with generous sickness benefits and pension fund. Apply with full details stating when available for interview to Chief Pharmacist, Grange Road, Leyton, E.10. C 1552

EDGWARE. Unqualified dispensing assistant required for good-class pharmacy. Previous retail experience essential. Apply with all particulars to John Harley, Ltd., 153 Regency Street, S.W.1. C 1549

HENLEY-ON-THAMES. Unqualified dispensing assistant wanted, either sex. Permanency, top wages. No Sunday or holiday duty. Counter work optional. Fairbairn, 24 Reading Road, Henley-on-Thames. Telephone: Henley-on-Thames 211. C 1541

ILFORD. Pharmacist required to manage expanding branch close to busy main-line station. Up-to-date dispensary and excellent supporting staff. Self-contained flat available within easy distance of the branch. Attractive salary and bonus scheme. Apply with full details stating when available for interview to Box C 1551.

LEEDS. Reynolds & Branson (Retail), Ltd., require gentleman as qualified manager of their pharmacy in Lower Briggate, Leeds, I. C 1547

LIVERPOOL. Pharmacist-manager required for new pharmacy, permanent position. Salary £832 per annum for 44-hour week, full supporting staff which includes a dispenser. Apply, Managing Director, Metcalfe & Co. (Liverpool), Ltd., 34 Landford Avenue, East Lancashire Road, Liverpool, 9. C 1513

EDMONTON, MIDDLESEX. Excellent opportunity for energetic pharmacist to manage busy branch in pleasant area. Well-fitted shop. Adequate assistance. Modern dispensary. Progressive salary with monthly bonus and rota duty payments. Accommodation available if required. Permanency with pension fund, etc. Apply with full details stating when available for interview to Box C 1550.

FINCHLEY, N.3. Unqualified assistant required for good-class pharmacy. Duties chiefly dispensing with some counter work. Hours 9 a.m. to 6 p.m. Permanency. Salary plus bonus. Three weeks holiday a year. Please apply with details of previous experience to Messrs. Young & Harrison, Ltd., 476 Hertford Road, Enfield, or telephone Howard 1723 and 2916, for an appointment. C 7328

LONDON, S.E. Pharmacist manager required immediately; permanency; 15 minutes from Piccadilly; salary £750 plus bonus and free fully furnished living accommodation, suitable for bachelor, with all amenities. Only apply, please, if requiring permanency. S. Mansell, Dispensing Chemist, 310-312 New Cross Road, S.E.14. C 7377

MANCHESTER AND SALFORD Co-operative Chemists, Ltd., invite applications for the position of pharmacy branch manager at their Wythenshawe Branch (new estate). Salary, including bonus and rota duty, averages at present over £16 per week. Scope for increase. Housing accommodation if required. Good superannuation scheme in operation. Applications, stating age, experience, etc., to Superintendent Chemist, 67 Downing Street, Manchester, 1. C 7340

NORTH LONDON SUBURB. Excellent opportunity for experienced pharmacist to manage substantial business. Spacious shop and dispensary, nicely fitted. Good supporting staff. Excellent salary and monthly bonus. Superannuation fund, etc. Accommodation available. Apply Chief Pharmacist, Grange Road, Leyton, E.10. C 1554

PHARMACIST/MANAGER required, male or female, for well-fitted pharmacy, Bethnal Green, E.2. Convenient Central Line, £15 p.w. plus excellent commission. Apply A. Brunton, M.P.S., 515 Cambridge Heath Road, London, E.2. C 1573

PHARMACIST REQUIRED to manage branch business for private man, in rapidly developing S.W. London area. Good salary, commission and excellent prospects for keen young man. Apply Box C 1579.

STOKE-ON-TRENT. Pharmacists required, £850 p.a. plus rota fees. Modern Pharmacies, S.D., 3-bedroomed house, with garage in pleasant area, 44-hour week, superannuation and sick pay. Supt. Pharmacist, Burslem & District Co-op. Chemists, Ltd., 13 Market Place, Burslem, Stoke-on-Trent. C 1511

VACANCY for qualified dispenser. Apply J. T. Davies (Chemists), Ltd., 13 Walter Road, Swansea. C 1564

WANTED, PHARMACIST (male or female) as superintendent. House available. Rent free. Good hours and conditions. No Sunday work. Wages 14 gns. weekly. Apply to the Garndiffaith & Varteg Co-operative Society, Ltd., Garndiffaith, Mon. C 1574

IMPORTANT APPOINTMENT

Pharmacist or Chemist (A.R.I.C. or B.Sc.) required to join Production Department of Important Pharmaceutical Manufacturing House producing ethical medical specialities. Successful applicant will be given early consideration for appointment to Chief Control Chemist in the Company's Control Laboratory. Excellent salary for suitable man. Outstanding prospects for promotion. Applicants with good experience should submit full details of careers to:

Box C 7308

Situations Open—Continued

S.E. LONDON. Manager required immediately (lady or gentleman). Salary £750 per annum plus bonus and free fully furnished living accommodation suitable for single person. Permanency. Box C 7378.

WANTED URGENTLY: Qualified chemist for country pharmacy. Steady counter trade, fair amount dispensing. Population 1,600 approx. Six-roomed house available. Very nice surrounding country, good-class clientele. Box C 1580.

LOCUMS WANTED

LOCUM PHARMACISTS required for London and suburban areas. Long or short periods August to October. Permanency at conclusion of tour if desired. Salary and expenses basis. Apply to H. Warburton, M.P.S., London Co-operative Chemists, Ltd., Grange Road, Leyton, E.10. Phone: Leytonstone 5671. C 1553

RETAIL (OVERSEAS)

THE UNITED AFRICA COMPANY, LTD., require for service in British West Africa a pharmacist (British qualification only). Applicants should preferably be under age 36. Starting salary not less than £900 per annum rising by annual increments of £50 to £1,050 per annum at the end of the third year and thereafter in accordance with responsibilities of appointment held. Generous family allowances, free furnished accommodation and free medical services. There is a contributory pension fund which provides certain guaranteed benefits, including widows' and children's pensions and provision for retirement where the qualifying age for a pension is not reached. Initial kit allowance of £75. Colonial rates of income tax, tours of about 21 months followed by substantial leave on full pay. Free first-class passages are provided for men, their wives and children under age 8. Apply giving full particulars to the United Africa Company, Ltd., Staff Department, Unilever House, Blackfriars, London, E.C.4. C 7382

WHOLESALE

ALLEN & HANBURY, LTD., Ware, Herts, require pharmacist as a senior assistant to the manager of the factory. Preference will be given to applicants with previous industrial experience, aged 28-45. The post is pensionable. Apply, giving full details of age, qualifications and experience, to Personnel Manager, C 7341

ALLEN & HANBURY, LTD., require two pharmacists to act as medical representatives. Applicants would be required to undertake initial training for a period. Remuneration is by salary and expenses; a car is provided. Previous experience is not essential. There is a contributory pension scheme. Applicants should send particulars, in writing, of age, qualifications and experience to the Personnel Manager, Allen & Hanbury, Ltd., Bethnal Green, London, E.2. C 7326

ALLIED LABORATORIES, LTD., invite applications for the position of medical representative for the territory comprising Edinburgh and East Scotland. Previous experience is not an essential qualification but applicants should possess a sound modern therapeutic background, reside on and know the territory well. The position is a progressive and pensionable one. Remuneration is by way of salary, commission and expenses. Write in first instance to Sales Manager, Allied Laboratories, Ltd., 140 Park Lane, W.1. C 7361

AN OLD-ESTABLISHED COMPANY marketing nationally advertised cosmetic and toilet preparations requires a works manager, age 30/40, to undertake responsibility for packaging by mass production methods, factory control, including maintenance. Write, giving details of age and experience to Box C 1581.

BRITISH CHEMOTHEUTIC PRODUCTS, LTD., shortly requiring representatives with good chemist connection in the following areas:—(1) Northumberland and Durham; (2) Bristol, Gloucester, South Wales; (3) London. Car owner preferred. Good salary, expenses and commission. Please send full details first letter to Kemtheutic House, Bradford, Yorks. C 7365

An opportunity occurs for a young Pharmacist or Chemist (A.R.I.C. or B.Sc.) to join Production Department of rapidly growing company manufacturing medical specialities. Good salary, excellent prospects of promotion. Factory situated in Home County. Applications are invited from men at present engaged in Manufacturing or Retail Pharmacy. Full details of business career to Box C 7309

ASSISTANT CHEMIST of degree standard wanted for plant work in new plant, manufacturing fine chemicals and pharmaceuticals. Apply in writing giving details of career and education to Chief Chemist, Bayer Products, 15 Central Avenue, West Molesey, Surrey. C 7358

ASSISTANT SALES EXECUTIVE required by Riker Laboratories, Ltd. Previous experience is not necessary and while a pharmaceutical qualification is not essential, the position would admirably suit a recently qualified pharmacist who feels that he is suited to an administrative and sales promotional career. There are excellent prospects of advancement and a five-day week and pension scheme are in operation. Remuneration is by salary and bonus. Apply, giving full details, in confidence, to the Managing Director, Morley Street, Loughborough, Leics. C 1557

BAYER PRODUCTS, LTD., West Molesey, Surrey, require (1) experienced tablet coater; (2) experienced granulator. For interview and full particulars phone Tablet Manager, Molesey 3262. C 7371

BIOREX LABORATORIES, LIMITED. Sales representative required for expanding travellers force, calling on retail chemists, hospitals, with drugs, galenicals, ethicals, patents, dressings and sundries. Pharmacists preferred, but experienced representative, non-qualified, considered. Car owners with established connection in Greater London area. Salary, commission, expenses; a high income can be earned by an able person. Also industrial representative for London required. Apply with full particulars to the Managing Director, 47 Exmouth Street, London, E.C.1. C 7363

COSMETIC CHEMIST required by company marketing nationally advertised cosmetic and beauty preparations. Applicants must have ability to control manufacturing and maintain quality control. Write Box C 7373.

FOREMAN PACKER required. Fully experienced export trade, for manufacturing chemists. Five-day week. Stafford Allen & Sons, Wharf Road, N.1. C 7383

GRADUATE PHARMACIST (or suitably trained graduate chemist), aged not more than 30, required for responsible post in large pharmaceutical processing factory in Edinburgh area. Previous manufacturing experience desirable but not essential. Salary £600-£1,000 according to training and experience. Box C 7362.

IF YOU WISH to make selling to chemists your permanent career the following opportunities are open to you:—(1) An immediate appointment to a sales representative's post in the following areas:—(a) Leicester; (b) Liverpool; (c) Bristol. Previous experience in contacting chemists is desirable but not essential as full training in the Company's products and sales methods will be given. A car is provided and remuneration is by salary, commission and expenses. Age limits twenty-six to forty-one. Applicants should give full details of previous appointments, positions held, age and area desired. (2) Additional appointments are envisaged in 1955 and trainee representatives for these opportunities are required immediately at our North London Sales Office for a period of at least six months to absorb the necessary selling technique in preparation for a permanent post on the sales force. Salary of £400 per annum will be paid during training period. The following qualifications are necessary: Age twenty-five to thirty, mobility and willingness to remove to any part of the United Kingdom on appointment is essential. Applications, which should clearly state appointment of interest will be treated in strictest confidence. Apply Box No. H.S.M. C 7329.

MACLEANS, LIMITED, Great West Road, Brentford, Middlesex, has a vacancy in the experimental laboratory for a chemist (B.Sc. and/or A.R.I.C.) for research and development of pharmaceutical products. Applicant should have a flair for investigational work. Pension and profit participation schemes. Write giving fullest details of qualifications, experience and salary required to Personnel Manager. C 7379

HOME SALES MANAGER required by London Manufacturing Chemists marketing ethical and public products. Pharmaceutical qualification desirable. Excellent working conditions, good salary and prospects; pension scheme. Company's staff are aware of this advertisement. Applications, giving age, and full particulars to Box C 7317.

PARKE, DAVIS & COMPANY, LIMITED
Medical Service Department

Applications are invited from young men with Pharmaceutical qualifications for an appointment in the Medical Service Department. The duties attached to this post include the preparation of medical and scientific literature; answering technical inquiries, etc. The position is progressive and offers exceptional opportunities. Generous pension scheme, 5-day week. Staff restaurant. Please write in the first instance for an application form to the Manager, Medical Service Department, Parke, Davis & Company, Ltd., Staines Road, Hounslow, Middlesex. C 7376

MANUFACTURING CHEMISTS in North Lancashire require a pharmacist with Ph.C. degree. Applicant must have initiative and ability to control manufacturing. Reply in confidence giving full particulars of experience, age and salary required. Box C 1537.

MEDICAL REPRESENTATIVES required immediately by Lederle Laboratories for the following areas: (1) Sussex; (2) Liverpool and N. Wales; (3) Northampton and Leicester; (4) N.W. Riding Yorkshire; (5) Hants and Dorset. Applicants should be men of striking personality and initiative, should be 25/35 and have a pharmaceutical qualification or experience with an ethical house, of detail work among doctors and hospitals. Congenial, well paid posts backed by outstanding products and first-class promotional material. Liberal expenses, company car supplied. Full details in writing to Sales Manager, Lederle Laboratories Division, Cyanamid Products, Ltd., Bush House, London, W.C.2. C 7280

PARKE, DAVIS & COMPANY, LIMITED, invite applications from pharmacists for a junior executive position in their pharmaceutical manufacturing division. The position offers an opportunity to gain wide experience in modern, large-scale production methods. Some previous manufacturing experience is desirable, although students qualifying this year will be given equal consideration, 5-day week, staff restaurant, generous pension plan. Write with full particulars to Personnel Manager, Parke, Davis & Company, Limited, Staines Road, Hounslow, Middlesex. C 7320

RAPIDLY EXPANDING Moore Medical Products, Limited, require representatives for eight new territories: (1) North London; (2) South London; (3) North Wales, Cheshire, Shropshire; (4) South Staffs, Derby, Notts, Warwick; (5) Surrey, Sussex, Kent; (6) East Anglia, Essex; (7) North-east England; (8) Lancashire. These superannuated appointments offer wide scope to men aged preferably 28-35. Chemists' connection desirable but not essential. Good salary plus bonuses plus full expenses. Opportunities for future executive posts at the top. Apply Box C 7370.

REPRESENTATIVE WANTED

Representative wanted by manufacturers of surgical dressings and druggists' sundries, to call on chemists in Birmingham and district; salary, expenses and commission. Box C 7287.

QUALIFIED BACTERIOLOGIST wanted to take charge of laboratory in Newmarket area; must be experienced in laboratory techniques; knowledge of veterinary work an advantage but not essential. Please write with full details to Box C 7346.

REVLON require assembly department manager for South Wales factory (Swansea area). The position involves responsibility for bottling, packaging, etc., a complete range of cosmetic products on assembly line methods and offers considerable scope to right man. Practical factory supervisory experience, ability to control female labour and familiarity with filling and labelling machines essential. Salary according to qualifications and experience. Apply Revlon International Corporation, British Branch, Maesteg, Glamorgan. C 1567

EST. 1883

BIS. 1941

C. Ribbands & Sons*The Complete Pharmacy Fitters
Shopfronts and Interiors*

3 RAVEY ST., BISHOPSGATE, LONDON. E.C.2.

Situations Open—Continued

TECHNICAL OFFICER. Pharmacist required for remunerative executive post in the Technical Services Division of British Schering, Ltd. Duties include the collecting and collating of technical information leading to the evaluation of new products. An interest in pharmacology and modern therapeutics is therefore desirable. Pension scheme. Apply in writing giving full details to Technical Services Manager, British Schering, Ltd., 229-231 Kensington High Street, London, W.8. C 7357

TOKALON, LTD., require an experienced representative for Kent, Sussex and Hampshire to introduce their new range of beauty preparations. Applicants must be car owners and existing connections with chemists will be an advantage. Remuneration by salary, commission, car allowance and expenses. Write stating age and experience to Tokalon, Ltd., 24 Gilbert Street, London, W.1. C 1577

WHIFFEN & SONS, LTD., a member of the Fison Group of Companies have a vacancy for a representative to assist with the sale of their fine and pharmaceutical chemicals. Age 25-30, experience of this type of work is important. Salary according to age, qualifications and experience. Car provided, pension scheme, etc. Apply to: The Sales Manager, Whiffen & Sons, Ltd., North West House, Marylebone Road, London, N.W.1. C 7372

WINTHROP PRODUCTS, LTD. (Associates of Bayer Products, Ltd.) require a young man (22-25) of good education with a pharmaceutical or medical background to assist the Export Sales Manager. The position is interesting and progressive. Full particulars education, experience and present salary to Export Director, Winthrop Products, Ltd., Africa House, Kingsway, London, W.C.2. C 7339

WHOLESALE (OVERSEAS)

COSMETIC CHEMIST required by well-known firm of makers of beauty products with view of taking up position in South Africa after a thorough training in English factory. Box C 1520.

TABLET-MAKER REQUIRED for responsible post overseas. Pharmaceutical qualification less important than experience and technique, as adequate pharmaceutical supervision will be maintained. Attractive salary and terms of employment, with house provided. Applications to Box CD438, LPE, 55 St. Martin's Lane, W.C.2. C 7354

SITUATIONS WANTED

3/- for 18 words (min.) then 2d. per word.
Box 1/-

RETAIL (HOME)

YOUNG UNQUALIFIED MALE, experienced dispensing and counter, desires post with accommodation, Southern England preferred. All replies acknowledged. Box C 1571.

WHOLESALE

CHEMIST, qualified, exceptional experience, wants part-time or occasional work. Pharmaceuticals, cosmetics, analysis, formulation, manufacture. Own lab, facilities if required. Box C 1572.

REPRESENTATIVE, 15 years' knowledge in retail and wholesale pharmacy, 3 years' experience calling on chemists in Manchester, East Lancs and Cheshire areas, for local firm, desires change with reliable company. Box C 1570.

PHOTOGRAPHIC

PLEASE NOTE regarding D. & P. We do not cut prices or give anything away free, but we do give a first quality D. & P. service by "return of post." All D. & P. returned on day of receipt every day of the year including August. Write now to:—Ormskirk Photo Services, Ltd., Park Road Works, Ormskirk, 6. C 7289

AGENCIES WANTED

8/6 for 36 words (min.) then 3d. per word.
Box 2/-

AGENCY WANTED for London and Counties inclusive in Metropolitan, Oxford and East Anglia Hospital regions. Established connection hospitals, Ministries, pharmaceutical, surgical and general wholesalers, leading chemists, multiples, co-ops and stores. Consistent coverage by two live salesmen. Box C 1540.

WANTED

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

ALL KINDS OF BOTTLES, JARS, SCREW CAPS, cartons, packaging materials and manufacturers' stocks of all kinds bought at fair prices for spot cash. We are buyers of merchandise of EVERY DESCRIPTION. Clearance Stocks, Discontinued lines, Surplus and Redundant Stocks. Should you have anything for disposal, please send us samples and particulars. Reliance Trading Co., 13 New College Parade, Finchley Rd., N.W.3. C 153

BOTTLES, JARS, CLOSURES, tubes, talcum tins or composites, cellophane, fancy goods, glassware, etc. Fair market prices offered for all submissions of interest. No agents please. Write with samples to Cobend, Ltd., 325 Caledonian Road, London, N.1. C 188

WANTED: Ex Government anti-freeze mixture; brown and pale amorphous wax; phthalic anhydride; blanc fixe; cheap priced resin oil; cedar wood oil; oleo beef stearine. Declare prices and packing. Apply Box C 7374.

WANTED: Details of tonnage and samples of all surplus or redundant grades of zinc oxides; tartaric acid B.P. Sprinkler top 4 oz. and 8 oz. empty bottles; 10 tons white seal zinc oxide; chromic acid flakes; potassium sulphate commercial. Apply Box C 7375.

WANTED SECONDHAND PLANT: Gas or electric water stills; incubator; autoclave, gas or electric; electric sterilising oven; 30-50 gallon melting pans, oil jacketed, gas or electrically heated; tube filling machine (hand); labelling machine. Apply Biorex Laboratories, Limited, 47 Exmouth Street, London, E.C.1. C 7364

WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc. No quantity too large. Our representative will call anywhere. Write or telephone: Lawrence Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel.: Bayswater 4020, 7692. C 140

MISCELLANEOUS SALES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

10 CWT. SORBITOL and 10 cwt. calcium carbonate, light, surplus to requirements, for disposal. Offers are invited. Sample sent on request. Box C 7380.

ENTIRE CHEMIST-SHOP WALLFITTINGS, counters and cases in old Spanish mahogany for sale at bargain price. Excellent condition. Apply J. T. Davies (Chemists), Ltd., 13/14 Walter Road, Swansea. C 1542

FOR SALE. Dropper Bottle Patent, a new closure, no bakelite. Perfect sterilisation. Production cheap and simple. Would entertain lump sum plus royalty or sell outright. Inquiries for fuller particulars to Box C 1582.

MODERN CHEMIST SHOP fittings, drug ranges, wallcases and frameless sliding doors, display counters and showcases; all styles of window fittings and display stands. D. Matthews & Son, Ltd., Complete Chemist Shop Fitters and Shop Front Builders, 14/16 Manchester Street, Liverpool. C 141

IMPORTANT

Box Office numbers are intended exclusively for specific answers to particular advertisements. Price Lists, Trade Circulars, Samples and Printed Matter cannot be forwarded.

STANDARD SACCHARIN TABLETS in packets of 100, aspirin tablets, 25's, 50's and 100's, and bicarbonate of soda in 4-oz. drums. Inquiries invited. Name and address printed no extra charge on orders of 1 dozen to 100 gross. Prices and samples on application. Tell Products, Ltd., Welbeck Works, 93 Cobbold Road, London, N.W.10. Tel.: Willesden 6873. C 149

TABLETTING MACHINES. One Manesty RD3 16-punch rotary, two Manesty 14-punch rotary, one Bradley & Turton, three Manesty No. 3 single punch, two Daniels 1 in. single punch machines. Several smaller machines, ex stock. Reed Brothers (Engineering), Ltd., Replant Works, Cuba St., Millwall, London, E.14. Tel.: East 4081 (5 lines). C 7360

TRADE MARK registered for perfumery. Also stock of labels, fancy boxes, etc. Suitable for perfumes, hand cream, cosmetics, etc. Worth £250, offers invited. Box C 1568.

BUSINESS OPPORTUNITIES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

MANUFACTURING CHEMISTS invite inquiries for the manufacture, packing, etc., of private formulae preparations, liquids, powders, tablets. Dispatch facilities available with own printing department. Frank Macowal & Yanatas, Ltd., Wills Shaw St., London, S.E.14. Tel.: Tideway 3846-8. C 122

TENDERS

NOTTINGHAMSHIRE COUNTY COUNCIL Tenders are invited for the supply of the following requirements to various child welfare centres, day nurseries, school clinics, ambulance stations and other premises within the County for a period of thirteen months commencing October 1, 1954: MEDICAL AND SURGICAL AND SUNDRY SUPPLIES. Further particulars with forms of tender and conditions of contract may be obtained from the County Medical Officer, County Hall, Trent Bridge, Nottingham. Completed tenders should be forwarded in sealed envelopes to be received by me not later than the first post on Monday, August 23, 1954.

A. R. DAVIS,
Clerk of the County Council.

Shire Hall,
Nottingham.

C 7367

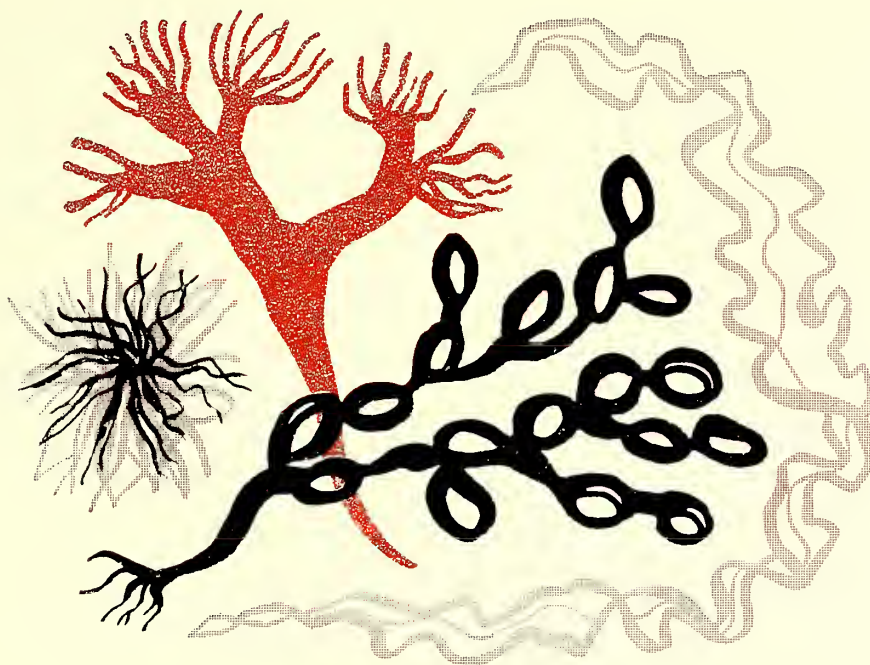
TRADE MARKS

THE TRADE MARK No. 334197 consisting of the word "Glymenstra" and registered in respect of chemical substances for use in medicine and pharmacy was assigned on the 12th January, 1954, by Anglo-American Pharmaceutical Company, Limited, of 59 Dingwall Road, Croydon, to Biddle Sawyer & Company, Limited, of 4 Grafton Street, London, W.1. without the goodwill of the business in which it was then in use. C 1575

STOCKTAKING

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

QUIET AND ACCURATE workmanship. Over 30 years' practical experience. Detailed inventories supplied to suit your individual requirements. Your own stock sheets priced. Terms moderate. C. W. Playfoot, 8 Aylward Road, London, S.W.20. Phone Liberty 4104. C 190



Available at once from Whiffens

IODINE PREPARATIONS

**Potassium Iodide, Ammonium Iodide,
Sodium Iodide, Iodine Resublimed, Iodoform**

WHIFFENS



suppliers of fine chemicals for more than 100 years

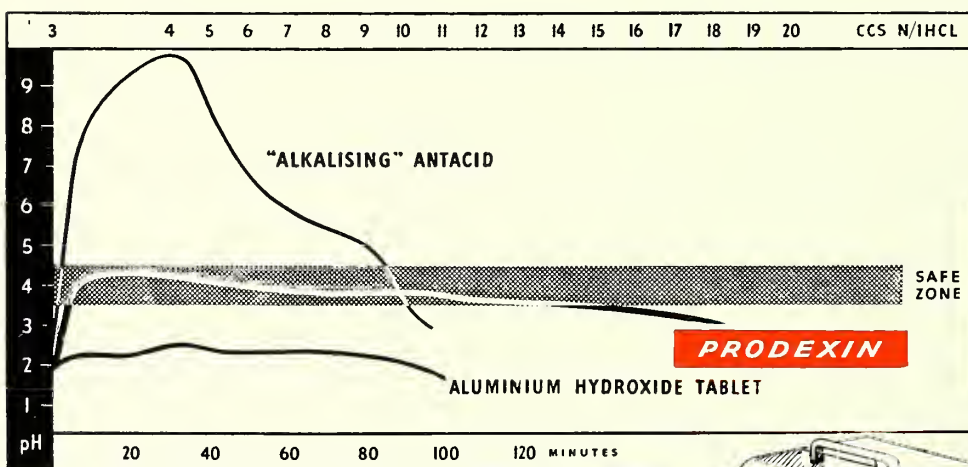
WHIFFEN & SONS LTD., NORTH WEST HOUSE, MARYLEBONE ROAD, LONDON, N.W.1

Telephone: PADdington 1041/9

Telegrams: Whiffen, Norwest, London

A New development providing **CONTROLLED** antacid therapy

Prodexin is a new product containing aluminium glycinate, and belongs to the buffer group of antacids. It depends for its action upon the slow release, on hydrolysis, of active aluminium hydroxide gel and glycine (amino acetic acid). Glycine rapidly raises the pH to 2, sparing the aluminium gel for the later stage of raising it into the "safe zone" of pH 3.5 to 4.5. Prodexin maintains an equable gastric environment for long periods without alkalisiation.



Prodexin provides a convenient, economical and safe treatment for HYPERACIDITY and PEPTIC ULCER.

The tablets, sucked one at a time, maintain the pH of the stomach contents within the "safe zone" for up to two hours. With Prodexin there is no risk of acid rebound or alkalosis. Prodexin tablets are pleasant to suck and they do not form gritty particles in the mouth or give rise to constipation.

PRODExIN

Each tablet contains:—

Aluminium glycinate.....0.9 gramme,
(dihydroxy aluminium aminoacetate)

Light magnesium carbonate 0.1 gramme.

The basic N.H.S. cost of treatment at the rate of 6 Prodexin tablets daily is 8½d.

Manufactured in the laboratories of

C. L. BENCARD LIMITED

MINERVA ROAD • PARK ROYAL • LONDON N.W.10

